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JOURNAL of the Mississippi STATE MEDICAL ASSOCIATION

VOLUME V

January-December, 1964

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X65-970

Volume V
Number 1
January 1964

JOURNAL of the Mississippi
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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

January 1964

Dear Doctor:

There'll be Hill-Burton funds aplenty in 1964 but a federal court has declared part of the act unconstitutional. Congress appropriated over $226 millions with $150 millions earmarked for general construction. Remaining sums were designated for nursing homes, diagnostic and treatment facilities, and rehabilitation centers.

> Sitting at Richmond, U.S. Fourth Circuit Court of Appeals knocked out "separate but equal" clause by 3-to-2 decision. Majority opinion held that Hill-Burton-financed hospitals were acting in violation of 5th and 14th amendments to Constitution when operating on racially segregated basis.

New York public health officials are puzzled about an outbreak of tuberculosis among personnel at the Albany Medical Center. So far, four confirmed and five suspected cases have turned up. A special PHS team is currently investigating, even studying histories of students, house staff, and faculty as well as exposure to tuberculosis patients.

New booklet can help guide physicians in furnishing required immunizations to patients jetting about the world. The publication, "Immunization Information for International Travel," is available for 35 cents from Government Printing Office, Washington.

The world's largest city will fluoridate its public water supplies, coming to the decision after 10 years of debate. The New York city council voted 19-to-4 for fluoridation on December 12. Program could be in for more trouble from one opposing councilman who may try to force the issue to public referendum later this year.

The incredible Krebiozen saga continues to unfold despite FDA's labeling it worthless in treatment of cancer. Promoters A. C. Ivy and Stevan Durovic filed suit to prevent FDA from furthering investigation, but later asked to withdraw charges when FDA countered by saying pre-1960 ampules contained only mineral oil. Possibilities of criminal action against Ivy and Durovic now seem strong.

Sincerely,

Rowland B. Kennedy
Executive Secretary

Steelworkers Sue AMA, Claim Recording Is Forgery

Washington - The United Steelworkers of America have filed a $400,000 suit against AMA, charging that a recording, "The Voice of COPE," is a fake. The disc, suit says, purports to be remarks of Steelworkers District 16 director, Paul Normile, demanding forced contributions to labor's COPE to fight AMA's campaign against King-Anderson. AMA President Edward R. Annis called suit "a transparent publicity stunt" and said AMA would reply in court. Damages sought include $100,000 for libel, $100,000 for invasion of Normile's privacy, and $200,000 for compensatory damages.

California Chiropractors Are Held To Limited Practice Status

San Francisco - The California law making it a misdemeanor to diagnose or treat any ailment without a license to practice medicine was held to be constitutional, and chiropractors were handed a setback in suit to expand statutory privileges. Ruling came as declaratory judgment, and appeals court held that chiropractic licensure act created only limited exception to medical licensure law.

HOPE Begins Medical Mission In Ecuador

New York - The teaching hospital ship S.S. HOPE dropped anchor at Guayaquil, Ecuador, to begin a 10 month medical mission of training physicians, dentists, and allied personnel. Aboard was the 85 member professional staff which will be augmented by rotating teams of 30 physicians and dentists for two months each. Familiar white ship has made missions to Asia and Peru, conducting training for more than 2,000 practitioners. HOPE is a private, non-governmental project.

Congressional Polls Show Overwhelming Opposition To King-Anderson

Washington - Thirty-two polls of constituents by members of Congress have turned up heavy opposition to fedicare by the folks back home. Only one of the 32 showed support, while overall response from almost half a million voters over nation disclosed about 68 per cent opposed, 26 per cent for, and 6 per cent, no opinion.

Myrdal Advocates More Welfare, Socialized Medicine For 'Economic Ills'

New York - Gunnar Myrdal, the socializing sociologist, has published a new book, Challenge to Affluence, in which he urges socialized medicine, more taxation, and greater welfare benefits as cures for unemployment and unfavorable payment balances. He says that the government "will have to take increased responsibility for organizing public consumption in the fields of education and health" and should "redistribute incomes on a large scale by its taxation, Social Security schemes, and agricultural policies."

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
January, 1964, Vol. V, No. 1

ORIGINAL PAPERS

The Malabsorption Syndromes

GERALD H. HOLMAN, M.D.
Kansas City, Kansas

In the last 13 years a clearer understanding of some of the basic mechanisms of celiac disease as distinct from the celiac syndrome has been reached. It has been shown that the celiac syndrome is a very complex entity and that there are a number of diseases which may produce the characteristics of failure to thrive, malnutrition, abdominal distention, muscular wasting, and at times steatorrhea. The author discusses the general classification of these disease entities and considers the specific characteristics of each.

THE ORIGINAL DESCRIPTION of the celiac syndrome was written by Gee in 1888.[1] Twenty-five years ago Anderson[2] delineated cystic fibrosis of the pancreas as a specific entity in the celiac syndrome complex, and in the last 13 years a clearer understanding of some of the basic mechanisms of celiac disease as distinct from the celiac syndrome has been reached. It has become quite obvious that the celiac syndrome is a very complex syndrome indeed, there being a large number of specific disease entities producing the syndrome of failure to thrive, malnutrition, abdominal distension, muscular wasting, and at times steatorrhea.

GENERAL CLASSIFICATION

Table 1 outlines many of the causes of malabsorption syndrome. Many of these have been known for several years, but others are just being recognized, and consequently not all the clinical features have been thoroughly described. By classifying causes into those producing steatorrhea and those not associated with steatorrhea, there will be at times some artificial overlapping. Generally speaking, however, this sort of classification serves as a useful guide.

STEATORRHEA

Cystic fibrosis. Much has been written on cystic fibrosis of the pancreas in the recent past.[3, 4, 5, 6] Suffice it to say that newer diagnostic tools, particularly the estimation of sweat electrolytes,[4] have focused the attention of many physicians on this disorder and made early diagnosis possible. The ubiquitous symptoms of exocrinosis range from neonatal meconium ileus to late childhood biliary cirrhosis. Certainly the commonest symptom-complex includes chronic respiratory disease with eventual pulmonary fibrosis, respiratory acidosis, cor pulmonale, heart failure, and death. Associated with these, there may be chronic, bulky, foul,

From the Department of Pediatrics, University of Kansas Medical Center.

Read before the Section on Pediatrics, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

greasy stools with a deficiency of pancreatic enzymes.

There is an additional symptom-complex that appears to be specific for cystic fibrosis and can be recognized as such on clinical grounds. Table 2 describes the clinical picture that we have seen recently in four different infants, all presenting with failure to thrive, purpura, fatty diarrhea, and clinical edema. There may be intestinal bleeding. Laboratory investigations have shown hypoproteinemia of a generalized nature, hypoprothrombinemia, responsive to parenteral vitamin K, a significant anemia, and variable sweat chloride concentrations. However, with repeated testing and with increasing age, significant elevations of sweat electrolytes can be demonstrated.

The last child seen with these symptoms entered another hospital with a hemoglobin of 7.5 gm. but with a normal platelet and white blood cell count. After transfusion, the child improved only to rapidly become anemic again and was admitted to our hospital at the age of 2½ months. Despite a birth weight of 9 lbs. and 12 oz., the child only weighed 8 lbs. and 10 oz. on admission. Hemoglobin was 6 gm., hematocrit, 19 per cent. Total serum proteins were 3.25 gm. per cent, with an albumin/globulin ratio of 1.8 to 1.45. The serum protein electrophoresis revealed 39 per cent albumin, 9 per cent alpha-1 globulin, 19 per cent alpha-2 globulin, 13 per cent beta globulin, and 20 per cent gamma globulin. The prothrombin time was 16 per cent, being prolonged to 30 minutes. This returned to 100 per cent with parenteral vitamin K. Institution of a low-fat diet with added oral enzymes (viokase) improved the child's clinical condition considerably. The hypoprothrombinemia is apparently related to the malabsorption of vitamin K. The hypoprothrombinemia and anemia may well be due to an associated exudative enteropathy.

Although exocrinosis is not curable, early diagnosis and treatment can delay the progress of the disease considerably. There are some who feel that this disorder, long considered uniformly fatal, may have such a good prognosis with the institution of early and effective medical care as to allow the individual to live into young adult life.[6]

TABLE 2

A VARIANT OF INFANTILE EXOCRINOSIS

Failure to Thrive
Bloody Diarrhea
Hypoproteinemia
Hypoprothrobinemia
Anemia, Edema
Variable Sweat Chloride
Purpura

TABLE 3

GLIADIN-INDUCED CELIAC DISEASE SIGNS AND SYMPTOMS

Pale, Bulky, Greasy, Offensive Stools
Muscular Wasting and Weakness
Abdominal Distension
Stunted Height, Poor Weight Gain
Irritability, Anorexia
Pallor, Anemia

Celiac disease. The relationship of wheat and rye flours to the onset of celiac disease has been known since 1950.[7] Many studies since that time have delineated the role of gluten, a part of wheat flour,[8] and more recently the specific role of gliadin[9] in the pathogenesis of celiac disease.

TABLE 1

CLASSIFICATION OF THE MALABSORPTION SYNDROME

Steatorrhea	*Non-Steatorrhea*	*Other*
Exocrinosis (Cystic Fibrosis)	Fermentative Diarrhea	Post Infectious
Celiac Disease (Gliadin Induced)	Lactase	Regional Ileitus
Idiopathic Celiac Syndrome	Sucrase	Psychogenic
Exudative Enteropathy	Isomaltase	Congenital Alkalosis
A-β-Lipoproteinemia	Maltase	Parasitic Infestation
Cow's Milk Allergy	Lactose Intolerance	Ca. and Fe. Intake
Drug Induced	Glucose Intolerance	Food Allergy
Absence of Bile Salts	Ganglioneuroma (VMA)	Intestinal Malrotation
Giardiasis		

Table 3 outlines the most frequent signs and symptoms stressing the muscular wasting, weakness associated with offensive stools.

Table 4 lists many of the laboratory findings found in gliadin-induced disease. Steatorrhea may be massive and demonstration of this is essential

TABLE 4

GLIADIN-INDUCED CELIAC DISEASE LABORATORY FINDINGS

Steatorrhea
Abnormal Xylose Absorption
Morphologic Change in Small Bowel Mucosa
Precipitins to Gliadin I
Exudate Enteropathy
Anemia—Iron Deficient
Hypocalcemia and Osteoporosis
Increased 5 OHIAA
Delayed H_2O Absorption and Excretion

in making the diagnosis. Abnormal xylose absorption[10] can aid considerably in the diagnosis of this disorder. An additional aid in the diagnosis is the morphologic changes in the small bowel mucosa obtained by peroral biopsy (Figure 1).

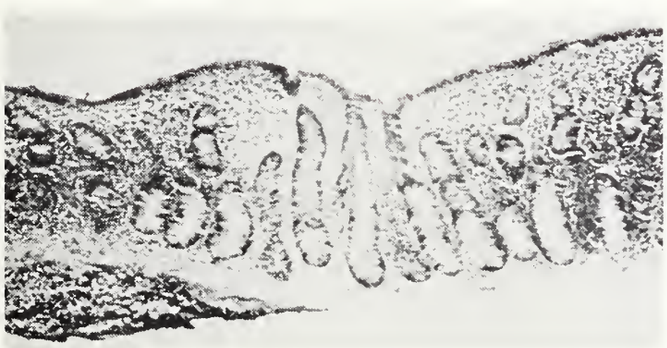

Figure 1. Small bowel mucosal biopsy. Note the denuded mucosa and small cell infiltrate.

If the baby is suffering from gliadin-induced celiac disease, simple observation of the biopsy specimen is frequently sufficient to discern an abnormal flattening of the mucosa and loss of normal light refraction. Examination under the microscope shows denudation of the villa of the mucosal wall and a definite cellular infiltration in the base of the denuded crypts. Epithelial mitotic figures are frequent. There is some controversy as to the rapidity of change towards normal of this lesion after the institution of a gliadin-free diet. There is no doubt that improvement occurs quite rapidly at times.[11]

Heiner has recently shown that serum precipitins frequently occur to a fraction of gliadin which he calls Gli I in many patients with celiac disease.[12, 13] Heiner has also stressed the fact that intolerance or allergy to cow's milk may produce a very similar syndrome to celiac disease, and indeed such patients may show precipitins to both Gli I and cow's milk protein at the same time.

Protein-losing enteropathy. Since Gordon described the syndrome of an exudative enteropathy in 1959,[14] this symptom-complex of hypoproteinemia, edema, and increased losses of protein into the gut has been recognized as part of many disease states (Table 5). Thus, one can see pro-

TABLE 5

CLASSIFICATION OF EXUDATIVE ENTEROPATHY

Gliadin-Induced Celiac Disease
Idiopathic Celiac Syndrome
Intestinal Lymphangiectasia
Iron Deficiency with Hypocupremia
Ulcerative Colitis
Hirschsprung Disease
Regional Ileitus
Post Infectious
Transient
Allergic
Giant Gastric Rugae

tein loss in patients with gliadin-induced celiac disease, in patients with ulcerative colitis or Hirschsprung's disease or in many other instances. Although the subject has been reviewed recently,[15] the following case summary may help to emphasize certain aspects of this fascinating symptom-complex.

Case summary. A 17-month-old white female was admitted to Kansas University Medical Center with generalized anasarca. She had had intermittent diarrhea since soon after birth with numerous changes of formula. The diarrhea consisted of seven to eight creamy, mushy, watery stools per day. She had been admitted to another hospital two months previous to this admission, also for an episode of diarrhea, edema, and anorexia. Examination revealed the blood pressure to be 80/60 mm. H.; temperature, 99.8 F.; respirations, 26 per minute; pulse, 140 per minute. The patient was 29.75″ tall (normal 31.4″) and weighed 20 lbs. (normal 23.2 lbs.); head circumference was normal. She was poorly muscled, puffy, short, hyperirritable. Eye lids and cheeks were puffy,

and the abdomen was protuberant (Figure 2). Ascites was present, and there was marked pitting edema of the extremities.

Pertinent laboratory data (Table 6) included a hematocrit of 37 per cent, sedimentation rate, 2 mm. per hour, and a blood smear consistent with severe hypochromia. Serum electrolytes concentrations were normal, but serum proteins were only 3.47 gm. per cent with an AG ratio of 2 to 1. Serum cholesterol was 114 mg. per cent and total lipids 326 mg. per cent. A lactose tolerance test, sweat electrolyte, 72-hour stool fat, and liver function were all normal. There were no ova and parasites on stool examination. The serum iron was 18 mg. per cent with a total iron binding capacity of only 31 mg. per cent. Urinalysis was normal; a triiodothyronine uptake was normal, but the excretion of intravenously injected polyvinyl protein was 8.05 per cent at 72 hours (normal less than 1 per cent).

Figure 2. Exudative enteropathy. Note the distended abdomen and the obvious muscle wasting. There is peripheral edema.

TABLE 6

EXUDATIVE ENTEROPATHY
LAB DATA

P.P.	*17½ Months*	*WF*	*Ht. 29 in.*	*Wt. 9.1 Kg.*
Hematocrit			37	
Sed Rate			2 mm/hr	
Blood Smear			Hypochromic Anemia	
Serum Iron			18	
TIBC (Transfer)			31	
BUN mg. %			5.6	
CO_2 mEq/L			13.8	
Na mEq/L			138	
K mEq/L			4.3	
Cl mEq/L			118	
Ca mEq/L			4.1	
P mEq/L			2.6	
TSP with A/G			3.47 2/1	
Cholesterol with Esters			114 54%	
Total Lipids			326	
Serum Acetone			Neg	
Lactose Tolerance			Normal	
Sweat Test			16 mEq Cl	
24 hr. Urine Protein			0.066 gm. %	
72 hr. Fat Stool			8.6% of Ingested Fat	
Ova & Parasites			Neg	
T_3 Uptake			11%	
PVP			8.05% in 72 hr.	
Alkaline Phos.			2.4	
SGOT			40	

Although the etiology of this child's protein-losing enteropathy was not clear, she was empirically treated with Prednisone 20 mg. per day with gradual reduction of this dose. Over the next several months, the child did very well, so that the drug could be completely discontinued. Now eight months later, she is receiving no medication

and appears well. This case illustrates that this syndrome may be transient.

The loss of protein into the gut may include albumin and any or all of the globulins. Thus transferrin loss may give rise to a significant hypochromic iron deficient anemia. In this case, the thyroxine binding protein was not lost into the gut, although we have seen this to be low in other patients.

A beta-lipo proteinemia. This fascinating condition first described by Bassen and Kornzweig[16] has been studied by Salt and co-workers.[17] They recently reported low total serum lipids, the absence of beta-lipo proteins, the low serum cholesterol, and the occurrence of similar lipid changes in suspected heterozygotes in the families. This condition is an inborn error of metabolism with a congenital absence of beta-lipo proteins, physical and mental retardation, central nervous system ataxia with retinitis pigmentosa, acanthocytes on peripheral blood smear and steatorrhea (Table 7). Lamy and co-workers[18] have also reported two cases and point out that the fat absorption defect is restricted to the intestinal mucosa. The latter is abnormal but has a different appearance than that seen in celiac disease. Villi are well defined but unusually clear and hypertrophied and filled with a Sudan-positive substance. They found an improvement in the general condition of the patients when lipids were removed from the diet. They could not demonstrate lipid changes in the suspected heterozygotes and suggested that detection may be difficult.

TABLE 7

A-β-LIPOPROTEINEMIA

Celiac Syndrome
Physical and Mental Retardation
Central Nervous System Ataxia
Atypical Retinitis Pigmentosa
Acanthocytosis
Absence of β Lipoproteins
Low Serum Cholesterol
Genetic Homozygote

MISCELLANEOUS CAUSES OF STEATORRHEA

Drug-induced steatorrhea (neomycin)[19] has been described in adults but not as yet in children. Absence of bile salts[8] is a rare cause and can be treated by the oral administration of bile salts. Duodenal giardiasis has been associated with the celiac syndrome. The parasites are almost always seen by careful evaluation of the stools, although, in rare instances they may only be seen in duodenal aspirates. A course of Atabrine therapy eliminates the parasite and abolishes the steatorrhea.

In summary, there are four major causes of steatorrhea in children, all of which can produce the celiac syndrome. (1) Cystic fibrosis: A genetically determined (recessive) inborn error of metabolism of undetermined type, this disease requires intensive medical and dietary therapy. Treatment of any acute respiratory infection promptly with proper antibiotics based upon sensitivity studies is essential. If pancreatic enzyme deficiencies co-exist, restriction of fat with a high carbohydrate and high protein diet together with oral pancreatic enzymes is helpful in maintaining adequate growth. (2) Gliadin-induced celiac disease: Although the basic defect in the intestinal mucosa is unknown at the present time, removal of gliadin completely from the diet will bring about prompt cessation of symptoms in almost every instance. Frequently, the patient presents with acute dehydration which will require the usual form of intravenous fluid therapy. It must be remembered that once the child has shown improvement on a gliadin-free diet that the diet should only be liberalized very gradually. It has been shown that patients in the so-called latent stage of celiac disease and who appear clinically well may still show very striking improvement if gliadin is withheld from their diet. (3) Exudative enteropathies: These conditions are difficult to control and treatment will depend upon the basic lesion. If regional ileitis is the basic cause, the condition can be improved by removal of the affected segment of gut. In other instances, corticosteroids appear to be of some help. (4) Idiopathic celiac syndrome: A poorly defined group at the present time which appears very similar to celiac disease, but does not respond to removal of gliadin from the diet. It is hoped that further knowledge will be forthcoming in this variety in order to guide our treatment.

NON-STEATORRHEA

Fermentative diarrhea with disaccharidase deficiency. In 1959 Holzel, *et al.*,[20] described two siblings presenting with colic and diarrhea since early in life. Both patients had done poorly on breast milk. Both children made a good clinical improvement when dietary lactose was reduced, and this led to an investigation of lactose metabolism. There was failure of normal rise in blood

sugar after an oral lactose load, so that a deficiency of lactase was hypothesized. Subsequently in 1960 Weijers and co-workers[21] reported three children in whom a similar clinical picture appeared to be caused by an absence of sucrase (invertase). Since that time, it has become abundantly clear that certain infants have a congenital, probably familial, absence of one or more of the intestinal enzymes required for hydrolysis of disaccharides. Deficiencies of lactase are more common and appear to occur by themselves, while deficiencies of sucrase are almost always associated with deficiencies of isomaltase.[22] In addition, some patients have been described as having an isolated maltase deficiency.

To illustrate this group of patients, the following case summary is presented. This patient will be reported in detail elsewhere. Table 8 summarizes the findings. The child had early onset of watery stools having a low pH while receiving a diet containing lactose. There was demonstrable steatorrhea, 48 per cent of dietary fat being lost in the stool. There was an inadequate rise in blood sugar after a lactose load, a sucrose load, and a starch load. On removal of lactose and sucrose from the diet, steatorrhea decreased to 18 per cent of dietary intake, and when starch was removed from the diet, the child no longer manifested steatorrhea. However, weight gain was not adequate, and it is likely that there were other problems existing with this child. The child appeared to be mentally retarded, was possibly partially blind, and had a partial malrotation of the large bowel. Nevertheless, she did demonstrate multiple disaccharidase deficiencies, probably congenital in origin.

TABLE 8

CONGENITAL DYSDISACCHARIDASIA

Celiac Syndrome (Early)
Acid Stools
Alactasia
Asucrasia
Aisomaltasia
Other Anomalies

This may be a more frequent situation than supposed and may well explain familial "milk allergy," which may in fact be an inability to hydrolyze lactose. Once the offending disaccharide is discovered, simple removal of this from the diet allows normal growth and development.

Lactose intolerance. This rare condition has been recently reviewed by Holzel, *et al.*[23] This condition should be differentiated from the disaccharide enzyme deficiency state. The patient with lactose intolerance is usually more severely ill and may die unless the disorder is quickly recognized. Although small amounts of lactose may be absorbed unhydrolyzed from the gut normally, these patients absorb large amounts of lactose. This appears to be toxic, producing malnutrition, diarrhea, vomiting, failure to thrive, and shock. These patients differ from the intestinal lactase deficiency (alactasia) patients in that lactose is excreted unhydrolyzed in the urine in large quantities. Again, removal of the lactose from the diet brings about a regression of the symptoms. This group also, unlike the usual case of alactasia, exhibit malabsorption and steatorrhea. Steatorrhea appears to be uncommon in true disaccharidase deficiency.

Glucose intolerance. Lindquist and Meevwisse[24] have recently described a patient who appeared to be intolerant of glucose. When glucose was given, the child developed diarrhea, vomiting, malnutrition, and became severely ill. Simple removal of the glucose and the substitution of fructose brought about normal growth and development.

Ganglioneuroma. (Table 9) It has now become clear since the original description by Greenberg and Gardner[25] that chronic diarrhea is frequently associated with neural tumors, particularly ganglioneuroblastoma or ganglioneuroma. However, as Strickler and associates have pointed out, no explanation can be offered for the fact that diarrhea appears only occasionally among patients considered to have these tumors.[26] In addition, those patients who do excrete large amounts of break-down products of epinephrine and norepinephrine (such as 3-methoxy-4-hydroxy mandelic acid VMA), may not always present with chronic diarrhea.

TABLE 9

FUNCTIONING NEURAL TUMORS WITH CHRONIC DIARRHEA

Watery Diarrhea
Failure to Thrive
Hypertension
Tumor Calcification
Increased Urinary VMA or Catecholamines
No Steatorrhea

This syndrome is exemplified by the following patient. This 2½-year-old girl was well until six

months prior to admission when she developed chronic diarrhea. Treatment with gliadin-free diet did not affect the diarrhea, and she was admitted to the Kansas University Medical Center. Evaluation showed a poorly nourished white female with obvious abdominal distension and mild peripheral edema. Blood pressure varied from 130/90 to 180/110. There was a mild pallor, and the circulating hemoglobin was 8.8 gm. The serum proteins were normal. X-ray of the abdomen revealed calcification of the right upper quadrant, suggesting a large suprarenal mass (Figure 3). The excretion of VMA (3-methoxy-4-hydroxy mandelic acid) was exceedingly high, being 55 micrograms per mg. of creatinine (normal 3 to 6 micrograms per mg. of creatinine). Exploration of the right upper quadrant revealed a large adrenal mass which was well encapsulated and could be removed in toto. Calcified plaques were palpable within the tumor. The child withstood the procedure well and has had no further problems.

This sort of tumor is a variant of a pheochromocytoma, so that precautions in regard to anesthesia and surgical management should be exactly the same in both types of tumor. Treatment, of course, is surgical removal.

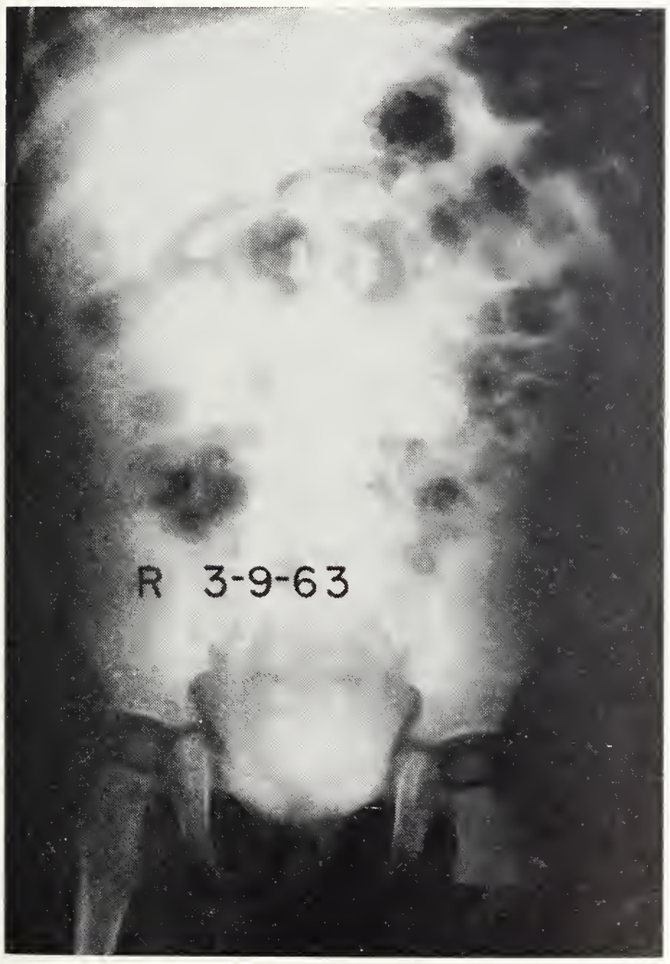

Figure 3. Ganglioneuroma. Note the calcified areas in the right adrenal area. There is mild obstructive uropathy from tumor pressure on the kidney.

In summary then, in the non-steatorrhea forms of malabsorption, it can be said that the recent finding of disaccharidase deficiencies in young children with failure to thrive has opened a new field of effective therapy in this previously difficult therapeutic problem. In addition, the presence of chronic diarrhea, hypertension, and abdominal calcification (Table 9), should lead one to suspect the possibility of the ganglioneuroma diarrhea syndrome.

OTHER CAUSES OF MALABSORPTION

Partial obstruction of the bowel either caused by chronic inflammation (regional ileitis) or partial malrotation can lead to the malabsorption syndrome with steatorrhea. Chronic parasitic infestation has been associated with this problem and psychogenic diarrhea can be sufficiently severe to produce malabsorption. Congenital alkalosis with potassium-losing diarrhea described by Darrow,[27] although rare, deserves consideration in any child who has severe hypokalemia, associated with chronic diarrhea.

SUMMARY

An attempt has been made to classify in part the causes of the malabsorption syndrome in young childhood. Because of Gee's original use of the word celiac, any patient with foamy diarrheal stools is often treated empirically as having celiac disease, but because this symptom-complex is one of multiple etiologies, a precise diagnosis is essential in each instance before effective therapy can be undertaken. It is important to decide whether or not the patient has steatorrhea and the cornerstone of this still remains the three to five day stool collection with chemical determination of the fat content. Disaccharidase deficiency in young children appears to be a frequent cause of failure to thrive and should be excluded by appropriate testing. It now appears that cow's milk protein intolerance (allergy) may be a significant cause of malabsorption in young infants. Only when a precise diagnosis has been made can effective therapy be undertaken. ★★★

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FIRST THINGS FIRST

From a speech by Dr. C. G. Suits, director, General Electric Laboratories: "In a week, we come upon solutions to a certain number of problems. We must then search our company's technology to see if we have the problems."

The Status of Treatment Of Tuberculosis in Mississippi

H. K. STAUSS, M.D.
Jackson, Mississippi

The incidence of tuberculosis has steadily decreased in the years since the advent of specific antimicrobial therapy. However, the disease is by no means a thing of the past. Several hundred new cases are reported in Mississippi each year. The author, who has been associated with the Mississippi State Sanatorium for over 20 years, discusses the control of tuberculosis in the state—past, present, and future.

REMARKABLE STRIDES have been made in the treatment and control of tuberculosis in the United States and throughout most of the civilized world in the last 50 years.

This improvement is the result of many factors. These include (1) the control of some sources and modes of spread of the disease, (2) more intensive and far-reaching case finding programs, (3) frequent and adequate isolation of known active cases, (4) more effective treatment regimens, (5) better surveillance of contacts, and (6) better socioeconomic conditions and medical facilities. All of these have had more effect since the advent of specific antimicrobial therapy following World War II. One gradually evolving factor has been a lessening tendency on the part of the public to stigmatize the tubercular patient.

TABLE 1
DEATHS FROM TUBERCULOSIS IN MISSISSIPPI
1920-1950

Year	*Number*	*Rate per 100,000 Population*
1920	2,271	126.8
1930	1,750	87.0
1940	1,057	48.3
1945	687	34.5
1950	558	25.6

The first table reveals the favorable trend of decreasing mortality rates even before antimicrobial drugs became available. The second mortality table shows the rather sharp further drop since the wider use of increasingly effective drug treatment regimens.

The third and fourth statistical tables reflect, on the one hand, a gradual decrease in the annual number of new active cases of tuberculosis, while also showing that the incidence of the disease, as yet, has not declined as much as hoped. These same figures indicate that, while far fewer people die of tuberculosis, there are still a large number of old and new cases. Since relatively few young adults now succumb to this infection, as they did between the two World Wars the obvious implication is that in the past 25 years more

TABLE 2
DEATHS FROM TUBERCULOSIS IN MISSISSIPPI
1952-1961

Year	*Number*	*Rate per 100,000 Population*
1952	418	19.2
1957	161	7.6
1958	172	7.9
1959	153	6.9
1960	147	6.7
1961	113	5.2

Read before the Section on General Practice, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

and more patients have escaped death to grow older with active disease or to experience re-activation. Not only that, but a large quotient of newly

TABLE 3

ACTIVE AND PROBABLY ACTIVE TUBERCULOSIS CASES REPORTED IN MISSISSIPPI 1952-1955

Year	*Number*
1952	1,139
1953	1,162
1954	1,007
1955	914

discovered cases comes from the older age groups of the population. When I first became associated with the Mississippi State Sanatorium more than 20 years ago, the patient population of that institution looked like that in a college dormitory. The currently hospitalized cases resemble the inhabitants of an old ladies' and old men's home.

Unfortunately, the older individuals are less amenable to case finding and less interested in

TABLE 4

ACTIVE AND PROBABLY ACTIVE TUBERCULOSIS CASES REPORTED IN MISSISSIPPI 1956-1960

Year	*Number*
1956	777
1957	784
1958	841
1959	786
1960	716

pursuing diagnosis and treatment of insidiously developing, only gradually disabling symptoms. Therefore, a large reservoir of cases and potential sources of infection among the senior citizens may be expected for some time to come. Another factor impeding control of tuberculosis is that elderly persons who have one or more known, debilitating ailments may be easy targets for undiagnosed tuberculosis.

However, there are a number of favorable aspects in present day tuberculosis control. More and more persons avail themselves of and can afford medical examinations. Education has guided people to tuberculosis screening and toward the more hopeful outlook of early discovered, promptly treated tuberculosis. More and more physicians resort to frequent chest x-ray examination and sputum study—even when Koch's infection is not suspected. Doctors are alert to the need for reassessment of patients whose "flu" or atypical pneumonia does not resolve as expected. They recognize that "chronic bronchial trouble" requires etiologic diagnosis as much as symptomatic relief and that even the so-called "innocent" appearing abnormalities on routine radiographic films, even in asymptomatic individuals, merit further investigation. General practitioners are now more willing to treat tuberculous patients, at least during certain phases of their overall course of therapy.

CURRENT CHEMOTHERAPY

Present day antimicrobial regimens are quite effective not only in bringing about ultimate control of many more cases of active infection but also in causing earlier disappearance of acid-fast bacilli from the sputum. They are also less likely to permit the emergence of drug-resistant organisms. Furthermore, current chemotherapy can effectively resolve even extensive dissemination of disease and permit ultimate control, usually by resection or collapse, of the primary nidus responsible for the spread.

Twenty-five years ago a tuberculous patient with moderately advanced involvement probably had at least a 35-50 per cent risk of "breakdown" and one with far advanced disease certainly a 50-85 per cent risk of two or more relapses in future years. Currently, such cases having the benefit of a properly applied combination of medical and surgical therapy likely have less than a 5-10 per cent chance of re-activation. Individuals with truly minimal tuberculosis, promptly and aggressively treated, should obtain early and complete control of this infection.

These favorable changes and causes for optimistic outlook, however, have lured some physicians and patients into a false sense of security. The consideration of a reported "small spot on the lung" should not imply "a small amount of tuberculosis." Unfortunately, any extent and type of advanced disease stems from minimal involvement, especially when fresh infection is not promptly and aggressively treated. Too often a patient is told or permitted to believe that a few months of rest at home or the Sanatorium and drug treatment should suffice for disease of most any extent.

The golden opportunity for control of any given case or tuberculosis in general is the time when the diagnosis is first established or strongly suspected. It is then that the patient must be advised of the potential seriousness of the disease and of the importance of prompt, sufficiently intensive and protracted treatment and also of the ultimate favorable outlook only if proper management is carefully followed. Ideally, each new case should initially be assessed and indoctrinated at a sanatorium. It is highly desirable that each individual be carefully evaluated by medical and surgical consultants to plan the diagnostic and therapeutic approach. This approach pinpoints the appropriate timing of certain diagnostic procedures, adjunct treatment measures, and surgical intervention. Such planning reduces complications and spreads to a minimum, lessens the emergence of drug resistance or untoward reaction, and permits definitive surgical care while there is still adequate antimicrobial therapy coverage.

THERAPY SCHEDULES

Generally, each patient should initially receive chemotherapy with two of the currently available three or more antimicrobial drugs. The exceptions to this are cases of genitourinary infection, severe and extensive lymph node disease, osseous involvement with soft tissue abscess, meningeal tuberculosis, and, far advanced pulmonary lesion with giant cavities. These should be placed on triple-chemotherapy.

In addition, certain forms of overwhelming, fresh, acute, exudative processes may require early concomitant steroid therapy under carefully controlled hospital observation.

The therapy schedules for cases of pulmonary tuberculosis usually require the following treatment periods: for minimal (noncavitary) disease, a minimum total of 15-18 months of a two-drug regimen; for moderately advanced involvement, a minimum total of 18-24 months of dual chemotherapy; for uncomplicated, far advanced lung lesions, a minimum total of 24-36 months of double or triple chemotherapy; for complicated or slowly resolving, extensive disease, drug treatment of at least three years, or indefinite treatment. Many individuals with long-standing disease who demonstrate a poor therapeutic response, drug resistance or idiosyncrasies may well require temporary coverage with the more toxic ancillary antibiotic agents, usually during the preoperative and postoperative periods, for two or three months. Persons having draining sinuses should continue drug treatment for at least six months after cessation of tuberculous discharge and complete healing of the tract. Likewise, drug therapy should be continued for about 9-12 months after surgery for tuberculosis and/or the attainment of clinical and x-ray stability of pulmonary, osseous, or lymphatic lesions.

Chemotherapy with but a single agent, isoniazid, probably is advisable and sufficient for clinically proven primary tuberculosis in otherwise healthy children or adults and is recommended for recent positive skin test reaction converters.

The advent of specific bacteriostatic and bactericidal antimicrobial therapy has favorably changed the scope and success of surgery as an adjunct in the arrest of tuberculosis. The dramatic effect of these drugs upon exudative caseous and ulcerocaseous lesions, their influence upon the complications of the disease itself, as well as their effect upon the healing process, has rendered previously inoperable patients into acceptable candidates for certain operations. Through this change, some formerly employed procedures became unnecessary, most operations more feasible and successful, while other more recently developed surgical interventions became not only applicable but ideal for the control of tuberculosis.

EXCISIONAL SURGERY

Excisional surgery is aimed at the removal of hazardous foci of infection and irreparably damaged lung tissue, particularly persistent cavities, relapsing and spreading aggregates of fibronodular lesions and large caseonodose residuals which pose a high threat or risk for smoldering chronic disease with future reactivation and spread of the smoldering chronic disease with future reactivation and spread of the disease. Properly chosen and timed surgical intervention decreases protracted morbidity, permits earlier and safer rehabilitation, lessens the risk of reactivation and spread, and offers a modality for eradicating persistent active disease in the individual patient. Thus, it is a very useful adjunct in the control of tuberculosis.

Tuberculosis is still an all too prevalent infection. It can mimic many other diseases. It is characterized by chronicity and a tendency for relapse with necrotizing, destructive, and crippling lesions. The tubercle bacilli are tenacious organisms with a high adaptability to adverse conditions, almost relentless perseverance, and an ability to remain dormant for many years retaining their capability for new attack.

Every doctor's office, clinic, and hospital has a place in the detection of tuberculosis and the re-

sources to initiate the control of an individual case. Phthisiologists and thoracic or other surgeons may be called as consultants in the management of multifaceted treatment problems. The Mississippi State Sanatorium and other tuberculosis wards are available for special diagnostic and therapeutic measures. Mississippi also has an alert and cooperative public health program to help with the care of known individual active cases and the screening of their contacts and to conduct mass surveys for the finding of unsuspected cases which make up the public reservoir of infection. In the final analysis, the eradication of tuberculosis depends upon the proper management of every individual patient. ★★★

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LITERAL TRANSLATION

An experienced hostess was giving a dinner party at which she wished to have exactly 16 guests. When one reply—from a physician friend—turned out to be illegible, she thought she knew exactly what to do. Hurrying to her neighborhood pharmacist, she presented the letter to him for translation. After studying the doctor's scrawl for a few minutes, the pharmacist turned and went into his dispensary, returning shortly with a bottle of green and black capsules. "Here's what the doctor ordered," he told his astonished customer.

Peripheral Vascular Diseases

RICHARD H. CLARK, JR., M.D.
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Major advances have been made in the past few years in the surgical treatment of arteriosclerotic vascular disease. The most significant findings have come in the surgical management of arteriosclerotic complications involving the abdominal aorta, femoral, and popliteal arteries. The author discusses the two clinical forms of the disease, occlusion and aneurysm, from the standpoint of diagnosis and proper management.

ARTERIOSCLEROTIC VASCULAR disease has been under attack from many angles in the past few years. The surgical treatment of this disease has advanced far, the greatest advances being made in the surgery of the complications of arteriosclerotic disease of the abdominal aorta, femoral, and popliteal arteries. Arteriosclerosis is a chronic long-standing disease which begins at an early age and actively progresses with age. It produces intimal degeneration, calcium plaque formation, and intimal ulceration in the arterial vessel and thereby gives rise to two forms of clinical disease, occlusion and aneurysm.

Occlusion of the artery is produced by the piling up of the degenerative products of arteriosclerosis and by the plaque formation. This process gradually chokes the artery until it is completely occluded by arteriosclerotic material and thrombus. Occlusion and loss of blood supply give rise to the signs and symptoms seen in this disease. Aneurysm formation is seen most commonly in the abdominal aorta just at its bifurcation. Here again the degeneration, ulceration, and plaque formation weaken the wall of the blood vessel and the constant pounding of the blood pressure upon the weakened walls finally produces the blister-like blowout which is an aneurysm. This gradually enlarging mass produces the symptoms of aneurysm.

OCCLUSION

I would like first to consider the occlusive disease in its entirety and then to move on to aneurysm. The leading symptom of vascular occlusion is intermittent claudication, that is, pain in the leg which is brought on by activity and relieved by rest. This is simply a matter of oxygenation since the decreased blood supply gives rise to ischemia which gives rise to pain, this being relieved by the lowered metabolism rate of the muscle upon rest. The site of occlusion can usually be foretold by the site of claudication, i.e., calf claudication usually denotes occlusion of the superficial femoral, thigh claudication usually denotes common femoral and/or iliac occlusion. Superficial lacerations and infections which fail to heal are frequently seen in people with occlusive disease; here again, loss of blood supply is the cause.

Hair and skin changes are seen frequently in persons suffering from occlusive diseases. The hair is for the most part lost, and the nails on the feet are atrophic, being brittle and hard. The skin is somewhat reddened and mildly edematous in the classical case. Impotence is seen frequently in the male because of arteriosclerotic disease and is on the basis of occlusion of the internal iliac artery. Of course, necrosis and gangrene with ulceration and infection are seen in the final form of occlusive disease. Here the tissue has been so starved for blood supply that life of the skin, tendons, and bone is not possible and gangrene is seen.

Many of these patients can be rehabilitated. Their limbs and lives can be saved by surgical correction of their ischemic condition. Gangrenous and necrotic areas can be confined to small areas,

Read before the Section on Surgery, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

amputations limited to small areas, surgical wounds healed, and claudication stopped by measures which correct the blood supply.

WORK-UP

After occlusive disease is suspected, the work-up is fairly simple and can be carried out with a minimum of equipment.

Aortic and iliac disease. In occlusive disease of the aorta and iliacs, palpation of the pulses is the most important diagnostic point. From this, the examiner can completely delineate the disease and make the diagnosis without any further study. Obviously, if the aorta is occluded, there can be no femoral pulses bilaterally. If the right iliac is occluded, there will be no right femoral pulsation and there will be a left. The aortic pulse can easily be felt above; however, this is not necessary.

A discussion of aortograms is always necessary in this regard since they have been widely used in the past. At the present time it is the feeling of most practitioners that aortograms are not necessary to diagnose the occlusive disease in the iliac and aorta. They give no information which can not be obtained from either observing pulsations, palpation of arteries or surgery findings; therefore, these are not recommended in the work-up of aortic and iliac disease. It is important that arteriograms of the femoral arteries be done in order to delineate the *runoff*. Runoff may be defined as a place for blood to go once it is brought through the occluded area. In other words, if the left iliac is occluded, the left femoral system must be open in order to get a successful outcome at operation. If there is no runoff, then many of these vessels will clot following removal of the obstruction and release of fresh blood into the occluded system below. Therefore, we do femoral arteriograms where there is aortic and iliac disease present. These are done percutaneously if there is a slight pulsation and the vessel can be punctured accurately; where there is no pulsation, they are done open under local anesthesia.

Femoral disease. Here again, pulses are most important. If femoral pulses are palpable in the groin and not palpable in the popliteal area, obviously there is occlusion between these two points and one can delineate the occlusion thereby. However, dye studies are most important in delineating femoral disease since the smaller arteries are involved frequently. Here again, the dye studies are done by puncturing the vessel under local anesthesia in the groin, injecting dye and taking x-rays as the dye is being injected. Runoff is very important in this disease since these operative corrections of occlusions in the superficial femoral will invariably clot if there is no runoff into the popliteal and tibial areas. With this in mind, the x-rays are usually centered on the knee so that the above vessels can be easily seen on the arteriogram. With open vessels below, a good result can practically be assured if the occlusive process can be removed. There is yet another reason for dye studies. Extensive disease involving the vessel with deep ulceration and calcifications will not lend itself to thromboendarterectomy, and some sort of by-pass can immediately be contemplated if this is found to be the situation.

INDICATIONS FOR OPERATION

The general condition of the patient should be fairly good. In cases where claudication is the chief complaint, there should be no serious acute major system disease which might be complicated markedly by an operative procedure. Impending gangrene is a major indication for operation, and this is an indication even when the patient's general condition is only fair. Restoration of blood flow can reverse necrosis and infection and limit gangrene as stated earlier. Lesser amputations with lesser risk to the patient can be done. The patient can be reambulated and made useful again.

Claudication which interferes materially with the earning capacity of the patient is a major indication for surgery, and this should depend to a large part on the patient's occupation. A man who walks 50 yards to work and 50 yards home without difficulty but who goes hunting once a year and gets claudication obviously is not a candidate for operative intervention. However, a man who works on his feet and uses his legs continuously in his job and who has claudication because of it, is a candidate for surgical correction. The risk to life and limb of operative procedures must be fully understood by the patient prior to doing these procedures, and it is with this in mind that the above recommendations are made concerning occupation and type of activity.

TREATMENT

Excision and graft of aorta and iliac arteries. This procedure was done initially; however, this has been abandoned as unnecessary and to my knowledge is not presently done.

Graft bypass. Dacron and teflon crimped synthetic grafts are generally available, and these are used to bypass areas where thromboendarterectomy is not possible. Here the beady calcification

and the severe ulcer disease would preclude the use of thromboendarterectomy and bypass graft can be done. This is the second choice operation in most hands and can be carried out on the aorta, the iliacs, and the femorals with the use of the various grafts.

Thromboendarterectomy. This is the best procedure for occlusive disease in most hands. It can be used for long and short segments; it is a direct attack on the disease; there is no foreign body inserted into the patient, and the results generally are better and longer lasting.

In the aorta and the iliacs the vessels are controlled with cross-clamping following which incisions are made on the anterior surface of the vessel. The occlusive material and the intima of the blood vessel are scooped out with a special spatula following which the vessel is irrigated thoroughly. The material removed is a ghost of the vessel wall and contains the mush-like occlusive process, i.e., the degenerative products of the arteriosclerosis and thrombus. Following closure of the vessels with running silk suture, the vessel is allowed to fill retrograde by releasing the iliac clamps. After this is complete, the aortic clamp is removed and blood flow is restored. It is important that the distal portion of the thromboendarterectomy be smooth and the intima well sutured to the vascular wall so that dissection will not take place.

In the femoral arteries endarterectomy strippers are used for removal of the occlusive disease. These are blunt-edged rings placed on fairly rigid wires, and they are passed from the common femoral area down to the popliteal. The common femoral artery is opened just above the bifurcation. The intima and the thrombotic material are dissected and the stripper is placed. The stripper is then passed downward to a previous incision in the popliteal area, and the arteriosclerotic and calcific material is removed in a long segment. Here again, it is important that the intima be adherent to the distal wall so that dissection will not take place. The vessel below in the popliteal area is usually cut completely across and reanastomosed following the thromboendarterectomy. The vessel again is allowed to fill retrograde and following this the common femoral clamp is removed and blood flow restored. For the thromboendarterectomy and for any vascular surgical procedure large quantities of blood should be available; however, they are infrequently used. The teflon and dacron grafts should be available so that if thromboendarterectomy is not feasible, graft bypass can be done. The vascular sutures used are usually 3, 4, 5, or 6-0 arterial silk. The strippers, of course, must be available also.

Lumbar sympathectomy. In the event that none of the procedures outlined above are feasible, lumbar sympathectomy is the choice. It is also helpful occasionally as an adjunct to thromboendarterectomy or bypass where the small vessels are occluded distally. Lumbar sympathectomy opens collaterals, and decreases tone in the walls of arterioles and venules.

RESULTS

The operative mortality in operations for occlusive disease is less than 2½ per cent and is falling every year. With femoral and popliteal disease and the procedures outlined above, good results are obtained in approximately 70 to 80 per cent of patients. This is a function for the most part of selection of cases, and this will approach 90 per cent with good selection. In the aorta and iliac the good results approach 80 to 90 per cent because of the large blood vessels involved. If the flow can be restored through these blood vessels, they will remain open almost invariably. This accounts for the excellent results seen in operation for these diseases.

ANEURYSM

Pain in the abdomen and a mass in the abdomen are the chief complaints usually seen in a patient with adbominal aortic aneurysms without rupture. With rupture, shock, acute abdominal pain, and signs and symptoms of acute abdomen with a pulsating mass are seen. This is an acute situation which must be handled rapidly or death will ensue.

WORK-UP

As in occlusive disease, the examination of the patient is the most important part of the work-up. A mass which pulsates both in the anterior and posterior and in the lateral directions is pathognomonic of abdominal aortic aneurysm. Plain x-rays of the abdomen in AP and lateral positions will reveal almost invariably the calcific outline of the aneurysm wall. This is the extent of work-up necessary. Dye studies are not necessary since they only tell something that is already known, and they may be dangerous because of puncture of the aneurysm wall.

INDICATIONS FOR OPERATION

The presence of abdominal aortic aneurysm with or without symptoms is indication for operation unless the patient has another life-threatening

condition of a fairly acute nature. Without operation, the five year survival of patients with abdominal aneurysm is 10 per cent. This is true because of rupture of the other 90 per cent within the five year period. The mortality of ruptured abdominal aneurysm without operation is 100 per cent.

TREATMENT

Excision of the aneurysm and synthetic graft replacement is the treatment of choice in abdominal aortic aneurysms. These grafts are the same as used in the occlusive disease; they are dacron or teflon crimped grafts with an aortic and two iliac limbs. In order to remove the vessel, the aorta and iliacs are controlled with cross-clamping. The vessel is cut completely across at all three points following which the aneurysm is dissected free except for its posterior wall. The aneurysm is removed except for the posterior wall; the posterior wall is left in place because of difficulty in dissecting from the vena cava. This procedure has been found to have many advantages over excision of the entire aneurysm. The vertebral vessels can be better controlled, and the danger of puncture of the vena cava is far less than when the entire aneurysm is removed. Following excision of the aneurysm, the graft is placed by anastomosing the graft to the aorta and the iliacs with the running silk sutures. The graft is allowed to fill retrograde following which the aortic clamp is removed and blood flow restored.

RESULTS

Mortality of this operation is from 7 to 11 per cent. Five year survival with operation is 62 per cent in these usually elderly patients. Without operation, as stated previously, it is only 10 per cent.

CONCLUSION

In conclusion, it may be said that the procedures for arteriosclerotic diseases of the aorta, iliac and femoral arteries have improved over the past few years and that the procedures for occlusive and aneurysmal diseases of these vessels can be done with a minimum of morbidity and mortality and with a maximum degree of safety. Most patients can be rehabilitated and their lives and limbs saved by the procedures outlined above.

★★★

415 South 28th Ave.

VIDEO VIEW

A television producer received a script titled "The Optimist." He called a meeting with his staff and said: "This title should be changed to something more simple. Of course we're intelligent and know what an optimist is, but how many of these idiots who watch TV will know he's an eye doctor?"

Paracervical Block Anesthesia In Obstetrics

JAMES W. BLEDSOE, M.D.
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During recent years, there has been considerable interest in the use of paracervical block anesthesia for relief of labor pain. The author reports experiences with paracervical anesthesia in a series of 100 patients. He concludes that this is a safe and highly satisfactory method of relieving labor pain which, when combined with pudendal block, provides excellent anesthesia for delivery. Further development of regional anesthetic agents of reliability and prolonged duration should vastly widen the scope of this method, he writes.

THE QUEST TO RELIEVE the pain of childbirth has been productive of numerous methods and agents over the years. Almost every month one can read in the obstetrical journals a description of the advantages of a new drug or a combination of old drugs. This in itself implies that none is entirely satisfactory. The crux of the problem has been to find an agent which provides ample pain relief during labor, yet has no untoward maternal or fetal effects. In addition, the agent should be simple to administer and should not impede the course of labor or delivery.

None of the commonly used methods or drugs completely satisfy all these criteria. The narcotics and barbiturates, used alone or combined with tranquilizers, generally provide satisfactory relief of first stage labor pain, but are less effective in second stage, may slow labor, and frequently cause fetal depression. Caudal and epidural anesthesia provide excellent relief of pain throughout labor and delivery and are of little danger to the fetus. On the other hand, their administration requires considerable skill, maternal hypotension is common, the force of uterine contractions is decreased, and delivery is affected by the increased incidence of deep transverse arrest and persistent occiput posterior.

In recent years there has been considerable interest in the use of paracervical block anesthesia for relief of labor pain. By blocking the autonomic sensory nerve fibers at the base of the broad ligament, anesthesia of the uterine fundus, cervix, and upper vagina is obtained. This mode of regional anesthesia is not new to the field of obstetrics and gynecology, having been used for many years in gynecological operations, usually under the name of uterosacral block. It has not been until lately, however, that much has appeared in the literature concerning its value in obstetrics. Recent investigations on large series of patients have emphasized the useful applications of paracervical block in modern obstetrics.[1, 2, 3]

The object of this paper is to present experiences with paracervical anesthesia at the University of Mississippi Hospital.

MATERIALS AND METHODS

Paracervical blocks, either alone or combined with pudendal blocks, were administered to 100 patients chosen at random. While there was somewhat more than the usual proportion of primigravidas (40 per cent), they were fairly representative of the average patient clientele. Included were two breech presentations, one twin pregnancy, two patients with heart disease, one with glomerulonephritis, two with hypertensive cardiovascular disease, and thirteen with pre-eclampsia.

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In selecting patients, several conditions had to be met before the block was given:

(1) Patient in active labor
(2) Presenting part at station 0 or lower
(3) Cervical dilatation of 3 cm. or more
(4) No major cephalopelvic disproportion

One per cent mepivacaine HCl (1 per cent Carbocaine HCl) was chosen as the anesthetic agent because of its low toxicity, wide dispersal, and long duration of action.

The block anesthetics were administered by several different members of the obstetrical house staff. When the appropriate indications for paracervical block were present, the patient was prepared in her bed with pHisoHex and aqueous benzalkonium (Zephiran), and a vaginal examination performed. A standard paracervical block tray was always available. This contained a needle guide (Trumpet Pudendal Needle Guide, Iowa Medical Supply Company, Fort Dodge, Iowa) with a fitted 20-gauge spinal needle, 10 cc. syringe with finger-grips, two towels, and an 18-gauge needle for withdrawing the anesthetic solution from the 50 cc. multiple dose vial. Before administering the block, gloves were changed and the patient draped with the towels provided. The operator stood on the left side of the patient if he was a left-handed examiner. He did not change sides during the procedure. Using the needle guide, the cervicovaginal junction was palpated at 4 o'clock, and the needle inserted through the guide. The guide is so designed that the needle projects approximately 1.5 cm. beyond the end. Insertion of the needle was uniformly painless. Aspiration was always performed, but rarely was blood obtained; in such instances it was merely necessary to withdraw the needle slightly. Ten cc. of the anesthetic agent was then injected, and the procedure repeated at 8 o'clock. In actual practice the target area was not critical, good blocks being obtained when injection was made somewhat higher or lower.

In 37 cases paracervical block was immediately followed by bilateral transvaginal pudendal block, utilizing the same equipment to deliver 10 cc. of 1 per cent Carbocaine to each side. This was also performed with the operator standing on the same side of the patient. The entire procedure could easily be accomplished in five minutes, with remarkably little discomfort to the patient. An occasional patient complained of the pudendal block, or of the intravaginal manipulation per se.

RESULTS

Relief of Pain. Seventy-eight per cent of patients had excellent or good pain relief (Table 1), full effect usually being obtained within five minutes of administration. When relief was classified as excellent, the patient had no further discomfort of any sort. Good relief was recorded when the patient had minimal discomfort, not requiring further medication. Fair relief was reported when the patient had some diminution of pain, and poor relief when she had virtually none. The uncertain results in five cases were due to extremely rapid delivery which prevented full evaluation of the result. Thirty-six patients required no analgesic medication whatever during their labors. When used, such medication was generally given for early first stage discomfort prior to the block, or in those patients whose duration of labor exceeded that of the block.

TABLE 1
PAIN RELIEF

Degree of Relief	*No. Patients*
Excellent	47
Good	31
Fair	12
Poor	5
Uncertain	5
	100

Optimal Time for Block. Although our paracervical blocks were administered at dilatations ranging from 3-8 cm., a dilatation of 4-6 cm. appears to be optimal. At this stage the procedure is simple, and the patient can generally be expected to deliver within the duration of the block. If given earlier, the labor may outlast the block, and if given later, the technical procedure becomes increasingly difficult as the cervix effaces and the presenting part descends more deeply. The expected duration of the block, of course, has to be taken into consideration when the time for administration is chosen. Our best results with primigravidas were obtained when the block was given at 6 cm., and with multiparas at 4 cm. Precipitous delivery occurred on several occasions when multiparas were blocked at 7-8 cm.

Duration of Block. The duration of the paracervical block averaged 90 minutes (Table 2). Since interpretation of block anesthesia necessarily ceased with delivery, only those patients are included whose duration of labor exceeded that of the block.

TABLE 2

DURATION OF ANESTHESIA

Time	*No. Patients**
0-29 min.	0
30-59 min.	6
60-89 min.	10
90-119 min.	11
120-179 min.	3
180 or more min.	3
Uncertain	5

* Only those patients are included who delivered after anesthesia wore off.

Combined Paracervical and Pudendal Block. The use of paracervical block alone was compared with that of paracervical and pudendal block when both were administered together (Table 3). Similar preliminary analgesic medication was given in both groups and about the same small proportion of patients required further analgesia after the block. Terminal anesthesia at the time of delivery was required much more often in the patients who received only paracervical block. Good anesthesia remained at delivery in approximately three-quarters of the patients in whom combined blocks were used. All of the patients in the combined block group who required terminal anesthesia had either unilateral or otherwise unsatisfactory pudendal blocks.

TABLE 3

COMPARISON OF PARACERVICAL AND PARACERVICAL-PUDENDAL BLOCKS

	Paracervical and Pudendal (37)		*Paracervical Only (63)*	
	NO.	PER CENT	NO.	PER CENT
Analgesia required before block	18	49	35	56
Analgesia required after block	3	8	4	6
Anesthesia required after block	8	22	49	78
Good anesthesia remaining at delivery	27	73	20	32

Method of Delivery. The method of delivery is described in Table 4. Eight patients had spontaneous precipitous delivery (an occasional unexpected result with this type of anesthesia), while 42 per cent had spontaneous uncomplicated deliveries. Operative deliveries accounted for 48 per cent of the total, with assisted breech extractions comprising the remaining 2 per cent. The unusually high incidence of operative deliveries is due to the large number of primigravidas in the series. No difficulty was found with any of the operative deliveries described.

TABLE 4

METHOD OF DELIVERY

Spontaneous	42
Spontaneous (precipitate)	8
Low Forceps	37
Mid Forceps with Rotation	2
Vacuum Extraction	9
Assisted Breech	2

Complications. Complications were minimal. There were no instances of hypo- or hypertension. In no case were the membranes perforated and no postpartal infection was noted. No untoward reaction to the anesthetic agent occurred. Three patients reported transient numbness of the leg, and labor was slowed for 15 to 30 minutes in six instances. Fetal bradycardia was noted in one case; this was questionably related to the anesthesia. Although two infants were born with low APGAR scores of 5 and 2, these were not thought to be related to the anesthesia used.

COMMENTS

In our hands, paracervical block proved to be a safe, reliable, and highly effective method of relieving the discomforts of labor. It was readily accepted by patients and physicians alike, so much so that it has been continued as standard practice on our obstetrical service.

Among the features of paracervical block that were particularly well-liked were the ease of administration, rapidity of onset, and excellent analgesia which it provided. In addition, there was a distinct impression among all the observers that paracervical block resulted in accelerated cervical dilatation.

Because of a limited span of action of approximately one and one-half hours, paracervical block using 1 per cent Carbocaine appears to be most useful in the multigravida where one may expect a relatively short duration of labor. Repeat blocks were done on primigravidas if the initial block wore off, but were often technically difficult due to the advanced cervical dilatation and low station of the head. It should be mentioned, however, that having obtained some proficiency in the technique during this study, we now frequently achieve blocks in excess of two hours. It is possible that the action of mepivacaine or a similar drug might be prolonged by the addition of a pressor agent. However, the use of the agents currently available may be associated with maternal hypertension or fetal bradycardia.

The combined paracervical and pudendal block was extremely useful, enabling us to carry patients completely through labor and delivery on that alone in most instances. Paracervical block is not intended nor generally sufficient for the delivery itself. Although a number of patients (20) did deliver quite comfortably with paracervical block as the sole anesthetic, this was the exception rather than the rule.

SUMMARY

Experiences with paracervical block anesthesia during labor in a series of 100 patients are described. It appears to be a safe and highly satisfactory method of relieving labor pain and, when combined with pudendal block, provides excellent anesthesia for delivery. The necessity for analgesic agents during labor is greatly reduced and often eliminated, resulting in more cooperative mothers and fewer depressed infants. Complications were negligible. Due to a relatively short average duration of action (90 minutes), paracervical block is probably more useful in multigravidas than primigravidas. Further development of regional anesthetic agents of reliability and prolonged duration should vastly widen the scope of this method. ★★★

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KINGLY CURE

Austrian physicians have accidentally discovered an exercise which helped Arabia's King Ibn Saud recover from whatever ails him. The King recently went to a sanatorium near Vienna to cure an undisclosed illness. After he returned home, he beat his Finance Minister with a cane when the minister submitted the bill for the cure. Ever since, the King has shown signs of recovery.

Clinicopathological Conference XLVIII

Conducted by the Department of Pathology
Mississippi Baptist Hospital
Jackson, Mississippi

In CPC XLVIII Dr. James R. Cavett discusses the case of a 13-year-old white male admitted with a chief complaint of jaundice. Other discussers are Dr. Elmer J. Harris and Dr. Leonard E. Posey. Dr. Louis Schiesari gives the pathology report.

A 13-YEAR-OLD white male was admitted to the Mississippi Baptist Hospital on June 13, 1963, with a chief complaint of jaundice.

Ten days previously he had developed symptoms of an upper respiratory infection. He reported to the office of his physician on June 7, 1963. At that time he was found to be jaundiced, and examination of the urine was strongly positive for bile. He was admitted to the hospital for further evaluation and treatment.

In 1960 the patient had reported to his physician because of general malaise and upper abdominal discomfort. He was found to be jaundiced at that time. No studies referable to hepatic function were carried out. It was felt that the patient had developed hepatitis. He was placed on bed rest for two weeks and recovered promptly and satisfactorily.

The patient had done well until January 1963 at which time he began noting the onset of gradually increasing fatigability and malaise associated with aching discomfort in the mid-epigastrium radiating to the right upper quadrant. This discomfort occasionally awakened him at night. He noted soreness and distress on jarring himself during exercise or while riding his bicycle.

The patient denied loss of weight (he was steadily gaining weight), itching, dark urine, or clay-colored stools. He had had no nausea, vomiting, anorexia, flatulence, or melena and had noted no peripheral edema. Careful inquiry failed to reveal exposure to hepatotoxins or alcohol. The patient had had no injections or transfusions. A review of systems was entirely noncontributory. Past history was noncontributory except for an episode of acute glomerulonephritis in 1954 followed by complete recovery. Family history revealed diabetes in the mother. A maternal aunt had a past history of gallstones.

On examination the patient was a well-developed, moderately obese, young white male in no acute distress. The sclerae were slightly icteric. There were no spider angiomata noted over the body. No palmar erythema was noted. Secondary sex characteristics were normal for his age. There was no evidence of an increased venous pattern over the abdomen. The liver was palpable three and a half fingers below the right costal margin, extending well up toward the left upper quadrant; the liver was moderately firm (not hard), smooth and slightly tender to percussion. The spleen was not palpable. The remainder of the physical examination was entirely unremarkable. Blood pressure was 110/60.

Admission hemoglobin was 13 gm. with an hematocrit of 40 vol. per cent. White cells numbered 9,800 with 5 per cent monocytes, 22 per cent lymphocytes, 73 per cent neutrophiles. Urinalysis revealed a specific gravity of 1.015 with an acid reaction and a normal yellow color. There was no albumen, sugar, blood, pus, casts, or bile present. Several repeat urinalyses were carried out. Each of the subsequent studies revealed varying amounts of bile present; urobilinogen was present in normal amounts. On June 14, 1963, serum bilirubin was found to be 2.85 mg. per cent (total); blood glucose was 110 mg. per cent; urea was 13 mg. per cent; SGOT was 26 units.

An erythrocyte fragility test was carried out on June 17, 1963, and was found to be within normal limits. Also on June 17, 1963, repeat bilirubin was found to be 4.6 mg. per cent (direct 3.3 mg. per

cent, indirect 1.3 mg. per cent). Alkaline phosphatase was 7.5 Bodansky units, thymol turbidity 0.8 units, serum proteins 6.50 gm. per cent, albumen 4.26 gm., globulin 2.24 gm., AG ratio 1.9 to 1, and SGOT 22 units. A cephalin flocculation test on June 17, 1963, was reported as a trace being present. Prothrombin time on June 17, 1963, was 50 per cent of normal. A heterophil agglutination was positive 1 to 7. Following the administration of vitamin K for 48 hours, prothrombin time was found to be 72 per cent. A BSP test revealed 20.5 per cent dye retention at the end of 45 minutes.

On June 14, 1963, a cholecystogram revealed extremely poor concentration of dye by the gallbladder. This study was repeated on June 15, 1963, following the administration of ten Telepaque tablets; this study revealed good concentration of dye in a normal appearing gallbladder which did not contain stones. On June 17, 1963, an upper GI series was reported as being entirely normal in all respects. An operation was carried out on June 21, 1963.

DISCUSSION

Dr. James R. Cavett: "I think we all have a copy of the protocol. I believe most of us have had a chance to go over it. I'll start off by summarizing it, then if there are particular points we need to cover, I think we can refer to the protocol.

"This is a 13-year-old youngster who came into the hospital because of jaundice. The immediate significant past history indicated that three years previously he had gone to his physician because of general malaise and upper abdominal discomfort and was found to be jaundiced. The protocol indicates that no particular studies of hepatic function were carried out, but that the diagnosis of hepatitis had been made. He was treated with bed rest with rather prompt improvement. It makes me wonder, with the jaundice recurring in three years in so young a patient, if 1960 was actually the first time he was ever found to be jaundiced. Of course, our information indicates that this is the case. The fact that this occurred on two occasions I think is sufficient for our needs at the moment, but I do wonder if this was actually the first time.

"We are told that in January 1963 prior to his admission to the hospital in June of this year, he began to develop some nonspecific complaints—aching discomfort in the mid-epigastrium, easy fatigability, and so forth. One thing that does bother me just a little is that the epigastric discomfort is described as awakening him at night on occasion. He further had noticed some soreness and distress when he jarred himself while riding a bicycle. These things certainly point toward liver disease. However, back in January when we presume that he was not jaundiced, while he did describe easy fatigability, we are told that he rode his bicycle and had been steadily gaining weight. While he was not feeling good, he apparently was not feeling too bad either. The past history describes an episode of acute glomerulonephritis which should be kept in mind. However, I do not believe that is significant to our present considerations.

"The studies in the hospital indicated that this young boy, who did not appear to be ill, was slightly icteric and had evidence of hepatic enlargement in that the liver was palpable below the right costal margin. The spleen is described as not being palpable. His hematocrit of 40 vol. per cent and hemoglobin of 13 gm. I do not regard as signs of significant anemia in a 13-year-old boy. The initial urinalysis did not show any abnormality, and there was no evidence of bile in the urine. However, on repeat examination of the urine for bile, this was found to be present, and urobilinogen was present in normal amounts.

"He had a modest elevation of serum bilirubin and normal SGOT. There was no abnormality on testing for erythrocyte fragility. Alkaline phosphatase was 7.5, and there was normal thymol turbidity and essentially normal serum sodium. Serum proteins and the AG ratio were well within normal limits. Repeat SGOT was normal. Cephalin flocculation showed a trace which is normal. Prothrombin time is listed as 50 per cent which may represent two or three seconds prolonged, but I think it is significant that this improved with the administration of vitamin K. This certainly indicates some ability of the liver to function with the administration of the vitamin K. BSP was significantly elevated in the amount of 20.5 per cent retention in 45 minutes. The cholecystogram, which at first showed very poor concentration, on repeat with the additional tablets showed a good concentration of dye and demonstrated a normally functioning gallbladder without evidence of stones.

"Let's try to break down the background causes of this young man's illness to consider the cause of his jaundice. First of all, is this due to an unusual accumulation of bilirubin in the serum? To me, he is not significantly anemic. The erythrocyte fragility test was negative. I think to complete this it would be nice if we had a reticulocyte count, but this is not absolutely necessary. I feel that the evidence at hand is such that we can pretty well

discard hemolysis as the cause of this boy's jaundice. His spleen was not enlarged either. There certainly are some things that make you wonder about an obstructive jaundice. I mentioned this serum bilirubin, but did not mention that the majority of the bilirubin was of the direct reacting, the conjugated bilirubin. Against the suggestion of obstructive jaundice is the alkaline phosphatase of 7.5. I would feel that in someone with a condition that produced recurrent jaundice due to extrahepatic obstruction we ought to have an elevation of the alkaline phosphatase.

"The patient had pain, but the pain was not an important part of this thing. Perhaps I should rephrase. The pain was important to the patient, but it was not as severe as one would expect from any sort of stones. And again, the cholecystogram was completely normal on the repeat. I think it is of some significance that the initial study showed poor function of the gallbladder, but I don't think we have any evidence for making a diagnosis of any abnormality of the biliary tract per se. The possibility of hepatitis being the cause of the present episode is a little unlikely in view of the normal SGOT. I wonder if this wouldn't be a good time to look at the cholecystogram."

X-RAY DATA

Dr. Elmer J. Harris: "The first examination was on June 14 where no visualization was accomplished. The second examination was on the following day. These films showed good concentration and didn't show anything that we could feel was representative of stones."

Dr. Cavett: "At what stage did you see the visualization of any of the hepatic ducts on this particular study?"

Dr. Harris: "We did not demonstrate any of the hepatic ducts on the examination. No fatty meal was employed in this examination, and under such circumstances it is a little unusual for us to see any of the ducts."

Dr. Cavett: "Was the BSP test done before or after the cholecystogram?"

Dr. Leonard E. Posey: "Several days after."

Dr. Cavett: "I would feel that the BSP was not affected by the cholecystogram. Careful investigation of history for drugs or other hepatotoxins was carried out, and there was no good evidence of this. There had been no transfusions within a recent time. I feel that obstruction is unlikely with the cholecystogram as normal as it is. Hemolytic background I think we can forget about. Hepatotoxins seem unlikely. I choose to turn aside from hepatitis.

"This brings up one other condition which I think would fit the particular type of jaundice that this young man had. I think we would have to consider two defects which would be considered as congenital defects of hepatic function. One is Gilbert's disease, and the other is variously termed chronic idiopathic jaundice or Dubin-Johnson syndrome. I believe that chronic idiopathic jaundice of the Dubin-Johnson type is most likely the diagnosis in this young man's case. In this condition, the liver apparently is able to conjugate some of the bilirubin, if not all of it, but the defect during the state of jaundice rests in its being unable to excrete the bilirubin into the bile. The bilirubin is regurgitated back into the blood directly or through the lymphatics. It does present several signs of obstructive jaundice, and herein lies one of the greatest problems that it presents."

THE DUBIN-JOHNSON SYNDROME

Dr. Louis Schiesari: "At the exploratory laparotomy a wedge-shaped marginal biopsy and a needle biopsy were taken from the liver. Microscopic examination revealed massive accumulation of coarsely granular golden-brown pigment within the parenchymal cells, concentrated chiefly and in a characteristic fashion in the centrolobular zone. Moderate fatty changes were uniformly distributed throughout the sections. There was no evidence of necrosis, inflammatory reaction, or bile stasis.

"The pigment gave a negative reaction for bilirubin and for iron; the granules stained dark purple with the PAS method. This peculiar pigment that goes under the name of lipochrome or lipofuchsin or wear and tear pigment is not specific for the organ and for the condition under discussion. It is also found in the heart muscle, ganglion cells, and seminal vesicles and elsewhere. But when it is present in such an amount and in such a peculiar distribution in the liver lobules, then it becomes a characteristic, if not a pathognomonic, microscopic finding of the so-called Dubin-Johnson syndrome. I must add that in order to make such a diagnosis a liver biopsy is a sine qua non requirement. Dr. Leonard Posey, who was called in as a consultant in this case, will give us a brief account of the clinical and physiopathological aspects of this syndrome."

Dr. Posey: "I'd like to congratulate Dr. Cavett on his differential diagnosis and his final conclusion. The patient's illness was diagnosed as Dubin-Johnson syndrome. I was asked to see this patient a few days after he came into the hospital. My line of reasoning as to getting his BSP and a few other things was precisely that expressed by Dr.

Cavett. We recommended that a liver biopsy be carried out for confirmation. The attending physician, however, preferred exploration. The patient was therefore explored, and a moderately enlarged liver with normal extrahepatic bile ducts was found.

"This is relatively an uncommon disease process. I think that if we are going to try to understand the Dubin-Johnson syndrome, it is wise to take just a moment to consider the normal metabolic processes that bilirubin undergoes following its formation in the bone marrow and reticuloendothelial system from the breakdown of hemoglobin until the time it is excreted. This type of bilirubin, formed following hemoglobin breakdown, is transported in its crystalline form. It gives an indirect van den Bergh reaction because it is lipid soluble, not water soluble. It is carried to the liver and is picked up by the hepatocytes and there is acted upon and conjugated with glucuronic acid by means of the enzyme glucuronyl transferase. In the conjugated form bilirubin glucuronide is excreted out of the hepatocytes into the cholangioles and thence into the bile ducts.

"Now there are a variety of congenital defects that can take place along the pathway of normal bilirubin metabolism. The first of these is the Criglar-Najjar syndrome, which is seen in newborns and is characterized by extremely high levels of indirect bilirubin and the development of kernicterus. Very few of these cases survive beyond the stage of infancy or early childhood. Gilbert's disease, formerly known as constitutional hepatic insufficiency, is the second variety to consider. This condition is due to a congenital deficiency of glucuronyl transferase. Therefore the liver is totally unable to conjugate crystalline bilirubin to change it from a lipid soluble to a water soluble form. Bilirubin piles up in the serum in the form of the unconjugated variety thus giving indirect reaction. The syndrome is associated with normal liver functions, a perfectly normal life expectancy, normal visualization of the gallbladder, and normal liver biopsy.

"In the other forms of the congenital bilirubinemias we come to the Dubin-Johnson syndrome and the Rotor syndrome. I felt that the primary differential diagnosis in this present case actually lay between these two conditions. Now the Rotor syndrome was first described in 1948 in a medical journal published in the Philippines. It wasn't recognized generally until a good eight or ten years later. Since that time quite a few cases have been described. The Rotor syndrome is remarkably similar to the Dubin-Johnson syndrome except for the fact that none of this brownish-black pigment is found in the liver on biopsy and the gallbladder visualizes perfectly normally. There may be in addition definite abnormalities as far as the various liver flocculation tests are concerned.

"In the Dubin-Johnson syndrome, on the other hand, the gallbladder usually fails to visualize at all although there have been a few instances reported where it has been visualized, although poorly, as in this present case. There is definite BSP retention at 45 minutes. The various flocculation tests are normal. Biopsy shows the peculiar pigment present in the cells. There have been kindreds described in which individuals possess the pigment in the hepatocytes but have normal visualization of the gallbladder and have a mild degree of hepatic insufficiency on liver function tests; other members may have no pigment whatsoever but have the other findings suggestive of the Dubin-Johnson syndrome. Apparently the two syndromes loosely fall together and actually may be close kin if not entirely different manifestations of a single defect.

"The defect in this instance is not with the conjugating mechanism at all for these people have normal glucuronyl transferase in their livers by microchemical techniques. Significant amounts of conjugated bilirubin are present in the serum. All other conjugative mechanisms have been found to be normal in these conditions. Thus far electron microscopy has not revealed the defect, either. It is thought that the trouble resides within the hepatocyte cell membrane, which in some way seems unable to excrete the conjugated products into the cholangioles. The main evidence thus far indicates that the conjugated products are regurgitated back into the lymphatics rather than into the blood supply and thus by the lymphatic circuit are able to gain egress into the general circulation.

"These individuals very interestingly have bromsulphalein retention primarily on the basis of regurgitation of conjugated bromsulphalein back into the lymphatics and thence into the circulation. As a result there is a diagnostic technique available which consists of a repeat determination of the bromsulphalein again two hours following the initial injection and comparing that to the level at 30 minutes. With the Dubin-Johnson syndrome the two hour level exceeds that found at the end of 30 minutes. The great majority of this material that is present in the blood at the two hour time is conjugated rather than unconjugated bromsulphalein.

"There is no question also that bilirubin is partially conjugated in some locus other than the liver in this disease because bilirubin glucuronide and unconjugated bilirubin make up only approximately 80 per cent of the total amount that is present in the blood. Apparently 20 or 30 per cent of the bilirubin is conjugated somewhere else, perhaps in the bone marrow but apparently by a totally different type of mechanism.

"The disease is attended apparently by a perfectly normal life expectancy. The individual can anticipate periodic discomforts and a temporary increase in jaundice if he has an infection, if he has surgery, or some bodily stress or trauma.

"Incidentally, the defect in the excretion mechanism was originally postulated by Mandema who felt that the BSP retention, the hyperbilirubinemia with significant amounts of conjugated bilirubin in the blood, and the difficulty in visualization of the gallbladder all represented a defect in the hepatocyte in the excretion of various conjugated substances into the extrahepatic biliary tract. Again I would like to congratulate Dr. Cavett on a well-thought-out protocol."

Dr. Cavett: "I think there is an important lesson here. These cases are being found more and more, and they do not have to be diagnosed by laparotomy. There is nothing wrong with doing a laparotomy when it has to be done, but this picture is absolutely typical and can be readily, completely, and easily diagnosed by a properly obtained needle biopsy. Dr. Posey, of course, suggested that needle biopsy be done."

BIOPSY PREFERRED

Dr. Posey: "There is no absolute guarantee, of course, that a person is going to do well under an anesthetic or at the time of laparotomy or with various surgical manipulations. Of course a properly performed liver biopsy is a safe and accurate procedure two thousand times out of two thousand and one.

"Along the line that you were discussing, there is an interesting report in which twin sisters with this syndrome were studied. One had had a cholecystectomy because of nonvisualization of the gallbladder. Since the gallbladder appeared normal at the time of laparotomy, rather extensive exploration of the common bile duct was carried out with prolonged T-tube intubation. The patient developed resistant cholangitis and as a result, had a great amount of liver damage.

"The liver biopsy obtained on this woman when she went to Mayo Clinic was that of a Dubin-Johnson syndrome with infected obstructive jaundice superimposed, which made a rather bizarre type of microscopic appearance. There is no question that if this woman had merely had a liver biopsy, as her sister did, she would have been perfectly all right and would have been saved literally years of invalidism. I think whenever we are faced with a problem of this nature, particularly in a younger individual, and we have no really good evidence that there is an extra-hepatic origin of the jaundice, we are duty bound to recommend liver biopsy in preference to laparotomy."

NOMENCLATURE

Dr. Cavett: "Dr. Dubin has made a proposal that this condition be called *mavro hepatic icterus* (from the Greek) which means black liver jaundice. I have never seen the liver in one of these cases, but the appearance of the liver grossly is most typical, or so I am told. Dr. Dubin in a seminar on liver disease in the *American Journal of Medicine* in 1958 listed the description of the liver given by various surgeons and pathologists.[1] Most of them described the liver as black-green or slate-gray. *Dubin-Johnson syndrome* has probably hung on and will be the name of this condition from now on but at least he says *mavro hepatic icterus* might be easier to remember."

Dr. Posey: "It is very ironic, though, that this disease was described independently by Dubin and Johnson in 1953 in the *American Journal of Pathology*[2] and slightly later (although apparently the manuscripts were submitted at almost identical times) by Sprinz and Nelson in the *Annals of Internal Medicine*[3] in 1954. The article in the *American Journal of Pathology* came out a little bit earlier than the one in the *Annals of Internal Medicine* so Dubin and Johnson get precedence and they call it the Dubin-Johnson syndrome. All of which shows it pays to be first!" ★★★

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Radiologic Seminar XXI: Neuroblastoma

ELMER J. HARRIS, M.D.
Jackson, Mississippi

NEUROBLASTOMA IS the most common abdominal tumor encountered in the pediatric age group with 75 to 80 per cent of cases being under five years of age. Most frequently these growths develop from neural tissue of the adrenal medulla, but may also develop from sympathetic nerve cells at any level of the neck, thorax, or abdomen.[1] They may vary from an extremely malignant embryonic type of sympathicoblastoma to a more benign form which is often designated malignant ganglioneuroma.

DISTRIBUTION

Neuroblastoma is frequently a nonencapsulated tumor, spreading by metastasis to the bones of the extremities, skull, and retro-orbital tissues.[2] In babies the liver may be massively infiltrated and yet no metastases identified outside the abdomen. This distribution is seldom encountered in children beyond the first year of life. Calcium is frequently present in the neuroblastoma, and its presence is presumed to indicate the end stage of a mass that is growing faster than its blood supply, with subsequent necrosis and calcification.

As with most abdominal tumors in childhood, there are no early symptoms. Later on, there may be weight loss, pain, fever of undetermined origin, diarrhea, anemia, and symptoms related to metastasis.

When the primary pathology is in the abdomen, the diagnosis can often be made from plain films and the excretory urogram. The neuroblastoma is extrarenal and tends to displace the entire kidney or ureter with little distortion of the calyceal system (Figures

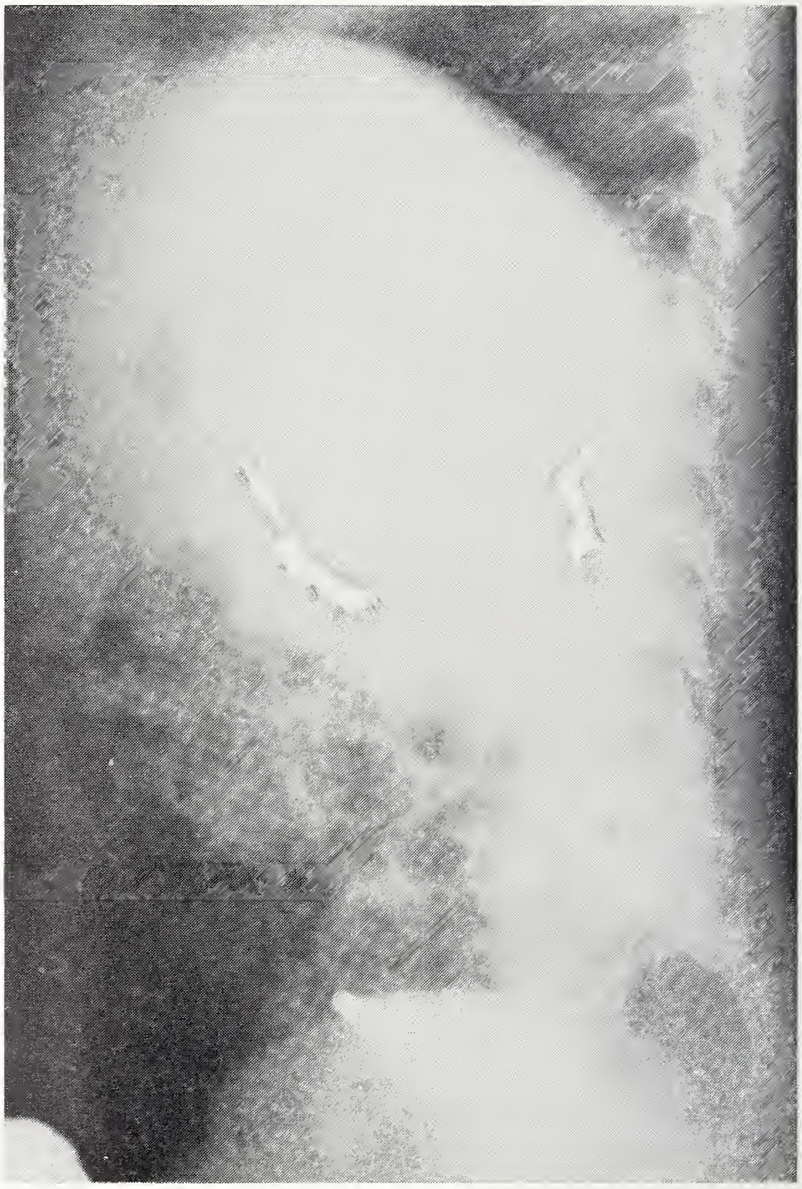

Figure 1. In this lateral film notice the anterior displacement of the right kidney without distortion of the calyceal system and pelvis. The normally located left renal pelvis is visualized over the spine.

Sponsored by the Mississippi Radiological Society.

From the Department of Radiology, Mississippi Baptist Hospital.

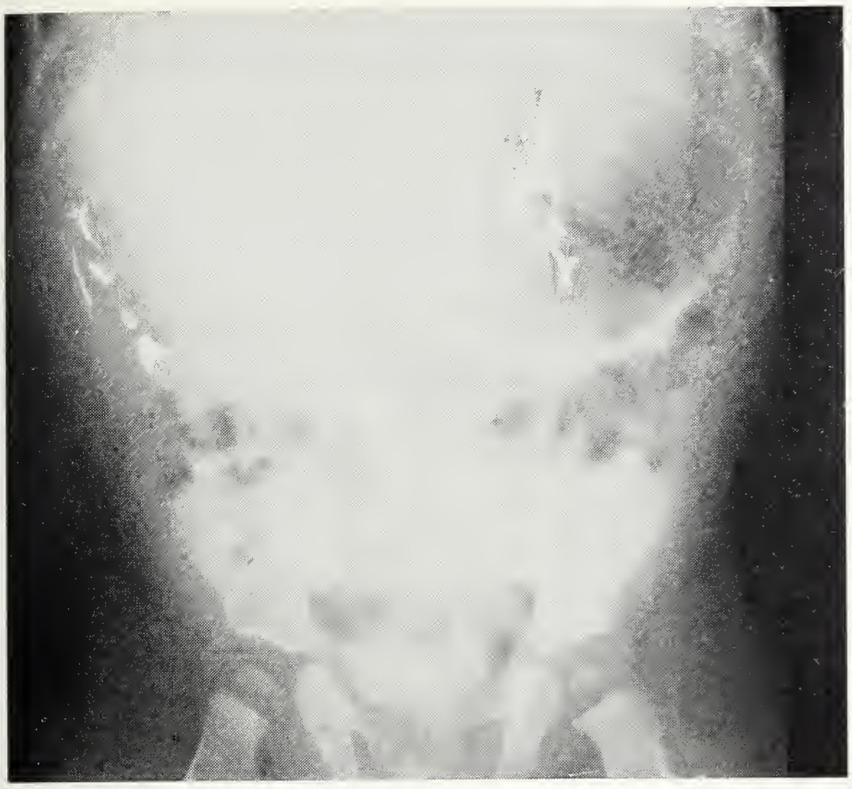

Figure 2. In the same patient, note the lateral displacement of the right kidney upon this excretory pyelogram by a medially placed partly calcified mass arising from the right adrenal.

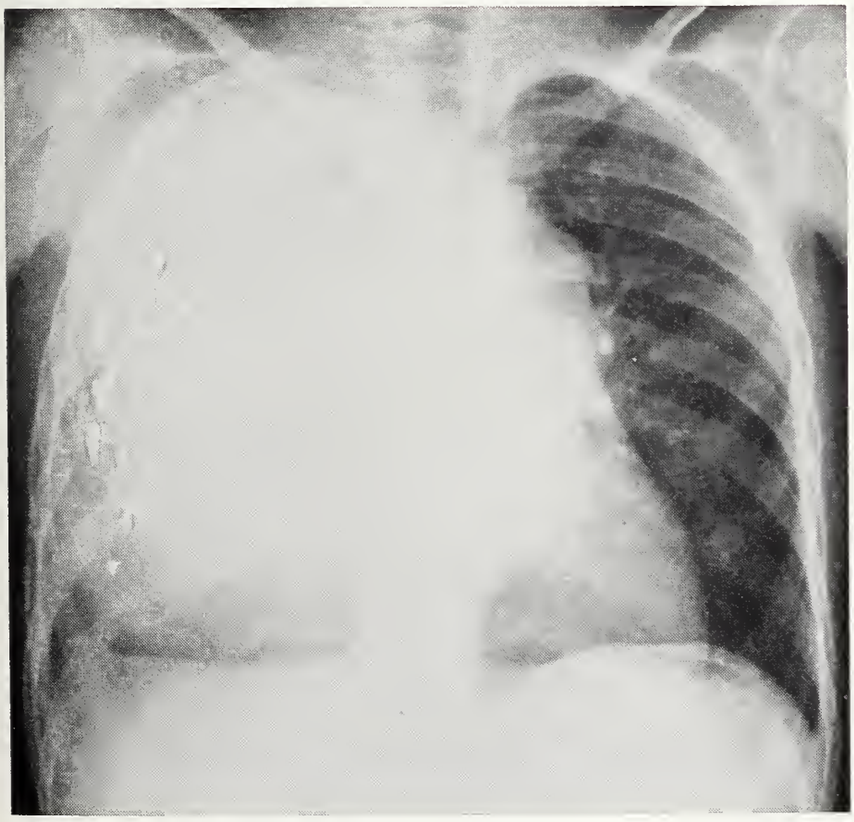

Figure 3. The partly calcified mass which fills most of the right chest and a portion of the left chest is posteriorly located. Notice the separation and thinning of the posterior portions of the ribs on the right.

1 and 2). It may, however, infiltrate the kidney and distort the calyceal system. Neuroblastomas which are primary in the chest (Figure 3) present tumor masses with clearly defined peripheral borders and often with calcifications. There may be separation or thinning of the ribs and pressure changes upon the vertebrae. Metastases seldom appear in the lungs until late. In rare cases a neuroblastoma may develop into a more slowly growing lesion, the ganglioneuroma.

SURVIVAL RATES

Surgery, irradiation, and chemotherapy are all used in the management of neuroblastoma. The highest survival rate is recorded in infants less than one year of age and in children whose tumor is resectible. However, even if the lesion is only partially resected and even if there is metastasis to the liver, the process may be curable. One of our patients is alive, well, asymptomatic and apparently cured more than five years after being treated for metastasis to bone (zygoma). Massive B-12 therapy has been of value.[3]

Cure rates, though leaving much to be desired, are gradually improving. Gross has recorded a series with overall cure rate of 36 per cent and with the cure rate being higher than 50 per cent in those babies under one year of age.[4] ★★★

1151 North State St.

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Illustrations retouched for purposes of clarity.

The President Speaking

'Voluntarism and Man's Dignity'

JOHN G. ARCHER, M.D.
Greenville, Mississippi

THE ECONOMIC PHENOMENON of the 20th century is the voluntary prepayment and health insurance explosion. And within the framework of this fortuitous development, the miracle is the extension of the voluntary health care financing mechanism to the aged. At this moment, about 10 million over-65 Americans, an estimated 60 per cent of the aged, are protected from the cost of illness and accident by voluntary plans. By 1970, eight out of 10 seniors who want and need this protection will have it, assuming, of course, that the federal government does not undermine this achievement of the private sector with King-Anderson-type compulsion.

Testifying before the House Committee on Ways and Means in late November, Dr. Edward R. Annis, our AMA president, said that "the fact that private enterprise has succeeded in finding the means to enable these citizens to stand on their own and take care of their needs is the major reason why King-Anderson is both unnecessary and undesirable."

Voluntary health insurance is currently available to persons over 65 in the United States, regardless of whether they are healthy or sick. All 70 of the nation's Blue Shield plans and the 77 Blue Cross plans have offered nongroup, first time enrollment programs for senior citizens. Our own Mississippi Blue Cross-Blue Shield did not find it necessary to enter this field; it has offered protection to the aged *since its beginning in 1948.*

About 1,800 private insurance companies and the 147 Blue plans are paying a total of $7.1 billion annually in health care benefits, up 11.5 per cent over a year ago. Growth of coverage extent, now 141 million Americans, is being matched by quality gains. As physicians, we know and understand the needs of our patients, and we have a logical concern for fulfilling our responsibilities in helping them meet these needs. We support voluntarism with the same fervor that we support quality medical care because we believe in the dignity of man. ★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume V, Number 1

January 1964

EDITORIALS

Tetanus Immunization: Challenge to Mississippi Industry

H. LOWRY RUSH, JR., M.D.
Meridian, Mississippi

I

PERSONAL HEALTH MAINTENANCE is a responsibility of the individual. Moreover, he has the right to choose how he will fulfill this responsibility, or, however ill-advised, not to fulfill it at all. On the other side of the coin, society has identified and recognized by law certain hazards to the public health. Legal controls designed to minimize such hazards have been imposed, and few would contend that the rights of the individual or of free enterprise are invaded when public authorities require closure of an open cesspool.

In a like manner, an employer has an obligation to provide a safe work environment for his employees. This is not altogether altruistic, either, because he has a valid interest in preventing lost time and decreased productivity by reason of illness and injury. Of course, diagnosis and treatment of nonoccupational health conditions are not responsibilities of the employer. But he may properly furnish, through his occupational health program, certain preventive services in stated circumstances where the employee, the employer himself, and the community stand to benefit. Among such preventive services are some immunization procedures.

The American Medical Association's House of Delegates has stated that "an employer should immunize his employees who, by reason of their occupation or job assignment, may be exposed to significant hazards against which immunization procedures are available." In an overwhelming majority of instances, employer-furnished immunization services are performed by or under the supervision of the plant physician who is usually a local private practitioner.

II

Of all significant industrial health hazards for which immunization protection is available, tetanus is one of the greatest. Definitive care of almost any wound or laceration demands consideration of tetanus as a serious complicating factor. That 14 confirmed cases of tetanus were reported in Mississippi during 1962 by the State Board of Health's Division of Preventable Disease Control is a distressing commentary upon attitudes toward this vitally important immunization procedure.

The Council on Drugs of the American Medical Association states that 325 deaths from tetanus occur annually in the United States. Shocking as

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Member, Committee on Occupational Health, Mississippi State Medical Association.

this total is, it could be substantially greater, because only one out of four Americans has received toxoid prophylaxis. The efficacy of this immunization procedure is not a matter for debate, because experience with the armed services during World War II demonstrated conclusively that tetanus can be eliminated as a cause of death.

Inclusion of this preventive service in legitimate occupational health programs has concomitant benefits, too. Medicine recognizes with deep concern that immunization levels among Americans are at a dangerously low point. Any industrial immunization program, which may properly be undertaken as such, will obviously raise these levels in the community and through general health education, create public awareness of benefits thereby realized.

III

Local medical societies have a valid interest in the preventive aspects of occupational health programs. Through these bodies, physicians should be prepared and willing to extend advice and guidance to employers who demonstrate their good corporate citizenship and concern for the health of their workers by offering tetanus immunization services.

Nobody contends for a moment that tetanus—tragic as it is—poses even a fraction of the economic problem in lost work and productivity caused by the common cold. But good preventive medicine is not exclusively quantitative, because if it were, many of the conquered killers might still be around to make a showing in the annual mortality statistics. And as far as those Mississippians who died of tetanus in 1962 are concerned, the incidence and mortality are 100 per cent. ★★★

1817 14th Street

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Milieu Therapy

The Las Vegas buffs have hitherto monopolized the term "milieu," which the red and blue chip sports tell us means a bet at roulette on the board's middle vertical column covering the numbers 13 to 24. When Lady Luck smiles, the player collects two for one.

Down in neighboring Louisiana, the odds are better and the payoff is higher in "milieu therapy," an intriguing application of medical skills to rehabilitation of aged patients with a history of long term mental illness. Literally, "milieu" means a setting or environment, and physicians at the Central Louisiana State Psychiatric Hospital employ the term accurately in their team approach toward making the lives of their patients as much like those of all others in society as possible. Program objectives, they report, are designed to help long term, elderly patients whose mental illnesses are in remission and who are neither able to benefit from further intensive therapy nor are suitable candidates for summary discharge.

Most such patients with long residency in the hospital either have no relatives, are reluctant to leave the protective environment of the institution, or have families to whom the stigma of mental disease is such that they refuse to accept responsibility for them. Thus, milieu therapy includes a program of work, recreation, bringing the community to the patient, taking the patient to the community, and, ultimately, returning the patient to society.

The first step at the hospital was creation of a separate therapeutic unit. Although a medical and clinical facility in every respect, the unit has a home atmosphere and a noninstitutional decor. The first patient group consisted of 70 women patients, ages 60 to 80 years, who had been hospitalized for continuous periods of 10 to 40 years. The beginning activity was limited to simple housekeeping tasks, escalating to undertakings

"They say he's years ahead on styling."

of progressively greater individual responsibility. Then came organized religious activity, recreation, and community visits.

Some of the original group have been discharged. Others are on extended convalescent leave, and a few have been placed in foster homes where they are said to have become useful, wanted members of a family. Many will applaud this pilot endeavor, and all will hope for its success.—R.B.K.

The 1964 Regular Session

Within a matter of hours, the gavels will fall in the House and Senate as the 1964 regular session of the legislature convenes. It will be neither an easy nor a short session because the solons will be hard-pressed on funding a budget with built-in needs for more money to maintain ongoing programs. The new administration will present new and important legislative proposals, and there'll be no lack of bills relating to local and state needs.

Health and medical legislation will more than likely make its share of the headlines. The state medical association is pledged to seeking full implementation of Kerr-Mills. Changes in the medical practice act to require mandatory internship as a prerequisite to licensure, liability shields for scientific research and study projects, and a tightening of controls on use of x-ray will be in the hopper. And not least is the dedication of the association to safeguard the public from the legalization of cultism and the granting of practice privileges to unqualified irregulars.

Members of the legislature need the help and support of physicians. If the past is a measure of the future, this assistance and support will be gladly and freely offered. Every Mississippi physician can be counted on to do his part.—R.B.K.

State Morbidity Reported Through Dec. 6

The Mississippi State Board of Health reports the following occurrence of morbidity for 1963 through the 49th week of the year, ending Dec. 6, 1963. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	808
Tuberculosis, O.F.	43
Typhoid Fever	16
Encephalitis, infectious	18
Salmonella infections	21
Diphtheria	3
Dysentery	
Bacillary	68
Amebic	14
Dysentery, NOS	1
Food Poisoning, NOS	22
Diarrhea of Newborn	9
Septicemia, Strep.	1
Septicemia, Staph.	51
Septicemia, other	1
Septicemia, NOS	13
Septicemia of Newborn	6
Meningococcus infection	
Meningitis	21
Meningococcemia	2
Meningitis, O.F.	72
Gas Gangrene	1
Bac. Diseases, other	1
Polyneuritis	1
Poliomyelitis	9
Tularemia	2
Mononucleosis, infectious	99
Malaria, Vivax	1
Other Cestode Infest. (HN)	2
Hepatitis, infectious	560
Serum Hepatitis	1
Adenovirus (ARD)	3
Rocky Mt. Spotted Fever	1
Gastro-Enteritis	5
Helminthic infections	
Hookworm	1,207
Ascariasis	391
Strongyloides	60
Blastomycosis	1
Cryptococcosis	1
Myelitis	3
Sporotrichosis	2
Generalized Vaccinia	1
Rheumatic fever	7
Rheumatic heart	5
Histoplasmosis	13
Streptococcus infections	
Scarlet fever	273
Strep throat	2,390
Other inf. and parasitic diseases	1
Pertussis	99
Measles	753
Chickenpox	983
Tetanus	5
Mumps	692
Other complications of smallpox vaccination	3
Influenza	32,194
Gonorrhea	4,830
Syphilis	
Early	401
Late	157

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

NIX, JAMES ELMER, Jackson. Born Ellisville, Miss., Oct. 24, 1931; M.D., Jefferson Medical College of Philadelphia, Penn., 1956; interned Hermann Hospital, Houston, Tex., one year; residencies, St. Mary's Infirmary, Galveston, Tex., and Hermann Hospital, Houston, Tex.; elected Nov. 5, 1963, by Central Medical Society.

STEVENS, THOMAS EARL, Jackson. Born Decatur, Ala., Jan. 2, 1929; M.D., Medical College of Alabama, Birmingham, 1959; interned University of Mississippi School of Medicine, Jackson, one year; internal medicine residency, University of Mississippi School of Medicine, Jackson, three years; elected Nov. 5, 1963, by Central Medical Society.

YORK, MILTON REED, Jackson. Born Picayune, Miss., Aug. 27, 1932; M.D., University of Mississippi School of Medicine, Jackson, 1958; interned University of Mississippi School of Medicine, Jackson, one year; anesthesiology residency, University of Mississippi School of Medicine, Jackson, two years; member, Mississippi Society of Anesthesiologists and the American Society of Anesthesiologists; elected Nov. 5, 1963, by Central Medical Society.

LETTERS

SIRS: The Mississippi State Medical Association's Committee on Occupational Health feels that two recently published articles are of high significance with respect to the care of those sustaining occupational injuries. The committee recommends that all physicians who render this care read the articles. The references are Hirschfeld, A. H. and Behan, R. C.: The Accident Process, J.A.M.A. 186:193 (Oct. 19) 1963 (Part I) and J.A.M.A. 186:300 (Oct. 26) 1963 (Part II).

The second part published in the Oct. 26 J.A.M.A. is especially useful in evaluating the physician's attitude. The comment made in relation to chronicity, "except when clearly explained by the normal response to anatomical defects, chronicity in injury cases should be considered psychogenic unless proven otherwise," certainly tends to bear out a premise to which we subscribe: in cases of disability as a result of trauma or injury, there should be objective findings substantiating such disability.

Moreover, the views of the authors on prevention and treatment of chronicity are particularly illuminating. Conceding that psychiatric management is neither indicated nor desirable for all such cases, they state that "the best therapeutic instrument is the treating physician whose knowledge of the whole person enables him to use both psychic and somatic tools. Such a doctor would be an internist or a well-trained generalist," they continue, "and his greatest assets would be an interest in his patients and a breadth of knowledge."

An appeal is also made for such a practitioner to repress his own hostility. He should have some background in psychiatry, gained through reading and seminar training, and this training process should consume no less than a year. This new orientation would change the history taking procedure with improvement in physician-patient *rapport.*

GEORGE D. PURVIS, M.D.
CHAIRMAN, COMMITTEE ON OCCUPATIONAL HEALTH
MISSISSIPPI STATE MEDICAL ASSOCIATION
JACKSON, MISSISSIPPI

Crispell Will Speak At Annual UMC Day

Dr. Kenneth Crispell, professor of medicine at the Medical College of Virginia, Richmond, Va., will be the guest speaker at the annual UMC Day, sponsored by the University of Mississippi School of Medicine, Feb. 6.

UMC Day is a postgraduate education event for all alumni of the two-year school at Ole Miss, alumni of the four-year school which opened in Jackson in 1955, and for former house staffers and their wives. It combines reunion with continuing education and is supported by educational grants from Merck Sharp and Dohme and from Ayerst Laboratories.

The previous pattern of grand rounds, clinicopathologic conference and guest lecturer's paper will be followed, with reception and dinner that evening.

Attendance carries postgraduate category 1 credit for members of the Academy of General Practice.

Book Reviews

Synopsis of Ear, Nose and Throat Diseases. By Robert E. Ryan, M.D., Assistant Professor, Department of Otolaryngology, St. Louis University School of Medicine, and William C. Thornell, M.D., Assistant Professor, Department of Otolaryngology, Cincinnati College of Medicine, University of Cincinnati, and Hans von Leden, M.D., Associate Professor of Surgery, Head and Neck, University of California School of Medicine. 425 pages. St. Louis: The C. V. Mosby Company, 1963. $7.50.

This is an excellent monograph for ready reference concerning ear, nose and throat diseases. As the title states, it is a synopsis and is useful as a guide for the general practitioner or intern. It is too sketchy to be of much value as a reference to the specialist in ear, nose and throat, but it is interesting from the standpoint of its organization.

The organization is tidy and logical. It is divided into four parts consisting of ear; nose and paranasal sinuses; pharynx, and larynx. Each part is divided into chapters, and the first and second chapters in each part are applied anatomy and physiology, respectively. The succeeding chapters deal with common diseases of each system. Each disease is discussed in relation to its etiology, pathology, symptomatology, prognosis, and treatment. Following the discussion of each disease is an outlined summary of the symptoms and treatment which makes this book extremely useful for quick reference.

I heartily recommend it for the busy physician who wishes condensed, accurate, and easily found information for that 80 per cent or more of his practice which is ear, nose and throat.

JULIAN E. BOGGESS, M.D.

The Management of the Anxious Patient. By Ainslie Meares, M.D. 493 pages. Philadelphia: W. B. Saunders Company, 1963. $9.00.

Quoting from the preface: "This book is intended for the general practitioner, the student and all those who have professional dealings with the anxious patient. It does not aim to be a textbook in the ordinary sense of the word." The author is from Melbourne, Australia, and has written extensively on the subject of mental health. The ideas and theories expressed in this book are taken from his personal experiences and books and papers he has written on the subject.

The Atavistic theory of mental homeostasis is introduced, outlined, and explained. Many readers will not agree with his theory, but it does make interesting speculation. After reading a few chapters in the book, you realize that Dr. Meares has had extensive experience dealing with patients having many varieties of nervous disorders. He has classified the types of anxiety in a most detailed way. The general practitioner will find himself comparing examples of anxious patients with those in his own practice.

There are many sections of the book dealing with the method of interviewing and examining a patient in order to best bring out the true cause of anxiety. There are also many practical suggestions for learning to recognize hidden anxieties in a patient who may be coming to the doctor for unrelated complaints. Even the most experienced practitioner will find examples and suggestions that will be helpful in his practice.

All branches of medicine deal with anxious patients. Most of the causes of anxiety are taken for granted; however, the author shows how a combination of ordinary traits in a given person can lead to a serious anxiety state. The suggestions for conducting an interview and use of the physical examination to help bring out the true cause of anxiety are most interesting.

This book should be of particular interest to the doctor that is just starting his practice, the practicing psychiatrist, and all general practitioners who are interested and take the time to include some psychiatry in their daily practice of medicine.

RALPH L. BROCK, M.D.

Cecil-Loeb Textbook of Medicine. Eleventh edition. Edited by Paul B. Beeson, M.D., and Walsh McDermott, M.D. 1835 pages. Philadelphia: W. B. Saunders Company, 1963. $19.50.

Ever since the initial publication of Russell L. Cecil's *Textbook of Medicine* in 1927, the medical profession throughout the world has benefited from this excellent book. The 11th edition

has not tarnished the original image but enhances it and causes its excellence to be more firmly implanted in one's mind.

Although all previous editions have been sizeable, the 11th edition contains 170 pages more than the previous one. This alone is not significant, but these pages are put to splendid use with more than eighty new subjects being discussed. The information contained therein is current and is without useless filler.

Drs. Cecil and Loeb have retired from active writing, but the editing of this major contribution has been left in very capable hands. Beeson and McDermott have adhered to the formula adopted by Cecil in maintaining many authors, with each author writing about those subjects with which he is best acquainted. By having such an authorship, this book continues to remain current without interruption in spite of the retirement from writing and teaching of many of its previous contributors. In this edition there are four new associate editors and 66 new contributors, some of whom have written their new approach to an old subject. However, many have written material on new subjects such as genetic disorders, embryopathy, diseases of the skin and others.

Although Harold G. Wolff, associate editor for diseases of the nervous system, died just prior to the completion of the book, his revision of this section had been completed at the time of his death so that it appears intact.

When one considers the vast amount of medical information available today, it is easy to see what a difficult task is posed in compiling a book of this sort. It must not be too brief nor can it be rambling and too detailed if its desired purpose is to be achieved.

I recommend this book highly as an excellent textbook for the medical student and a valuable reference book for the house physician as well as the practicing physician.

RAYMOND F. GRENFELL, M.D.

Circulatory Physiology: Cardiac Output and Its Regulation. By Arthur C. Guyton, M.D. 468 pages with illustrations. Philadelphia: W. B. Saunders Company, 1963. $15.00.

This is a brilliant treatise on the physiology of the circulation presented in a most modest way by an author who is as much at ease in the handling of his engineering and mathematical research data as he is in applying this to clinical cardiovascular problems.

A most comprehensive and critical review is given of the various methods of determining cardiac output, i.e. the Fick (direct and indirect) indicator-dilution, foreign gas, pulse contour, ballistocardiographic, roentgenographic and flowmeter methods.

The many figures throughout this book are beautifully reproduced and placed very conveniently in relation to the text, making a convenient reference.

The discussion of regulation of cardiac output normally by the autonomic nervous system; tissue oxygen need; changes in blood volume; exercise and in abnormal states by circulatory shock; anemia; polycythemia; A-V fistulas; cardiac tamponade; and in heart failure, is most thorough and clearly presented.

Regarding congestive heart failure, the author proposes very logically that the terms "forward failure" and "backward failure" are confusing since forward failure means failure of the heart to pump blood forward; whereas, backward failure means damming up of blood behind the heart. However, when the heart fails to pump blood forward it also dams up blood behind it, and whenever the heart dams up blood behind it, it also fails to pump blood forward. He concludes, therefore, that forward and backward failure are identical, the heart simply failing to pump blood. He suggests that the physiological classifications of heart failure are cardiac failure with low output, cardiac failure with pulmonary congestion, and cardiac failure with peripheral congestion.

This monograph should be an asset to physiologists and an excellent reference book for clinical cardiologists.

WILLIAM H. ROSENBLATT, M.D.

Books Received

The Thyroid and Its Diseases. Third edition. By James H. Means, M.D., Jackson Professor of Medicine, Emeritus, Harvard Medical School, Chief of Medical Services, Emeritus, Massachusetts General Hospital, Leslie J. DeGroot, M.D., Associate in Medicine, Harvard Medical School, and John B. Stanbury, M.D., Associate Clinical Professor of Medicine, Harvard Medical School. New York: McGraw-Hill Book Company, Inc., 1963. 618 pages with illustrations. $15.95.

Trustees Approve '64 Legislative Plans, Monitor Ongoing Association Programs

The state medical association's Board of Trustees, acting at the traditional December midyear meeting, charted one of the most extensive legislative programs ever undertaken in behalf of better medical care for all Mississippians. This was the joint announcement of Drs. John G. Archer of Greenville, president, and John B. Howell, Jr., of Canton, vice chairman and acting chairman of the governing body during the illness of Dr. H. H. McClanahan, Jr., of Columbus, the Board chairman.

Topping the list of 1964 goals is full implementation of the Kerr-Mills program, locally controlled care for those over 65 not receiving public assistance and who are determined to need help. Other high priority measures include a liability shield for those engaged in research, tissue committee activity, and similar undertakings; mandatory internship as a prerequisite to medical licensure; additional safety measures with respect to ionizing radiation; and careful monitoring of ongoing health programs of the state. Examination of the coroner-ranger law, often a target for criticism, was also placed on the legislative agenda.

Dr. William E. Lotterhos of Jackson, chairman of the Council on Legislation, presented the program during the December 12 meeting. A special service project of the council, he said, would be the offer of an emergency care unit for members of the legislature during the 1964 regular session. Approved by the House of Delegates at the 1963 annual session, the unit would be staffed by a full time registered nurse and a volunteer "doctor of the day," chosen from among MSMA members.

Other legislative matters included review of the association's testimony presented before the House Ways and Means Committee last November in opposition to the King-Anderson bill, compulsory federal medical care under Social Security.

The trustees also acted in connection with the new program of medicine and religion, approving appointment of a six member body to direct asso-

Officers and trustees at the Board's midyear meeting are, clockwise around the table, Drs. Riddell, Simmons, Howell, Taylor, Davis, Nelson, Arrington, Rogers, Crawford, O'Mara, Moak, Archer, and Patterson. The Board concentrated on 1964 legislative programs during the December session.

ciation undertakings in the new field. Progress reports from the Mississippi Medical Political Action Committee and the joint liaison committee with the Mississippi Hospital Association were received.

The Board reviewed the recent decree and opinion of the chancery court of Lauderdale County in the suit, *State Board of Optometry v. Charles Chester,* in which MSMA had intervened as *amicus curiae* in the interest of medicine. The case involved action against an optician alleged to have adapted and fitted contact lenses in violation of state law. The court enjoined the defendant against repetition of the act alleged but refused to so enjoin all opticians. It was reported that the optometrists will appeal to the Mississippi supreme court.

Both the Board and officers expressed satisfaction with the work of the association's councils and committees during the working year and predicted a new high in service.

Participating in the midyear parley were Drs. Archer; Howell; C. D. Taylor, Jr., of Pass Christian; Everett H. Crawford of Tylertown; C. W. Patterson of Rosedale; J. B. Rogers of Oxford; Mal S. Riddell, Jr., of Winona; Lamar Arrington of Meridian; W. E. Moak of Richton; and J. T. Davis of Corinth, acting as observer for District 3 usually represented by the chairman, Dr. McClanahan. Association officers, in addition to Dr. Archer, who were present included Drs. Omar Simmons of Newton, president-elect; B. B. O'Mara of Biloxi, speaker of the House of Delegates; and Howard A. Nelson of Greenwood, vice speaker.

Central Medical Opens Polio Immunization Drive

The Central Medical Society will begin a mass polio immunization campaign January 1964, with 100 per cent protection of the entire eight-county area as its goal.

Clinics will be set up in 100 locations to administer Sabin oral polio vaccine on three Sundays approximately one month apart. The exact dates, times and places will be announced later.

Chairmen for the physicians' community service project include: Dr. Jim G. Hendrick, Hinds County and over-all campaign chairman; Dr. William M. Wood of Carthage, Leake County; Dr. Charles H. Heywood of Canton, Madison County; Dr. Curtis D. Roberts of Brandon, Rankin County; Dr. Percy T. Howell of Forest, Scott County; Dr. Charles Pruitt, Jr., of Magee, Simpson County; Dr. John K. Wilson of Raleigh, Smith County, and Dr. Maria J. Mangold of Yazoo City, Yazoo County.

Dr. Joseph B. Miller, Jr., of Jackson is in charge of getting supplies for the entire area while Dr. David B. Wilson will see to transporting and distributing them. Dr. Durward L. Blakey will set up over-all records. Dr. Raymond F. Grenfell of Jackson will head an intensive publicity campaign to stimulate full participation.

An advisory committee includes Dr. W. L. Jaquith, president of Central Medical Society; Rowland B. Kennedy, executive secretary of Mississippi State Medical Association; Mrs. Maurine Twiss, University Medical Center public information director; Robert Touchstone of Clinton, Pfizer Laboratories representative, and Mrs. Kitty Kennedy, executive secretary of Central Medical Society.

Southern Medical Elects Dr. Moreton President

Dr. Robert D. Moreton of Fort Worth, Tex. was elected president of the Southern Medical Association at the 57th annual meeting in New Orleans, Nov. 18-21. Dr. Moreton succeeds Dr. Daniel L. Sexton of St. Louis, Mo.

A native of Brookhaven, Miss., Dr. Moreton attended Tulane University and Millsaps College. He obtained his medical training from the University of Mississippi School of Medicine and the University of Tennessee Medical School.

Dr. Moreton has served as instructor of physiology at the University of Mississippi School of Medicine and is currently serving as clinical professor of radiology at the University of Texas Southwestern Medical School, Dallas, Tex.

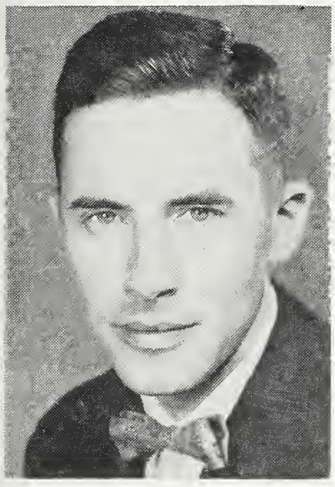
Other SMA officers for 1964 are: Dr. R. H. Kampmeier, Nashville, Tenn., president-elect; Dr. Garber Galbraith, Birmingham, Ala., first vice-president; Dr. C. Barrett Kennedy, New Orleans, La., second vice-president; and Robert Butts, Birmingham, executive director.

At a concurrent meeting of the woman's auxiliary to the Southern Medical Association, Mrs. Thomas A. Baines of Jackson was elected councilor for Mississippi. Approximately 1100 doctors' wives attended the meeting which was the auxiliary's 39th annual convention.

UMC Names Dr. Jackson Associate Professor

Dr. John F. Jackson, 34-year-old internist, has been appointed associate professor of preventive medicine (genetics) and assistant professor of medicine at the University of Mississippi School of Medicine beginning Jan. 1, 1964.

Dr. Jackson received his B.A. degree in chemistry from the University of Mississippi and his M.D. degree from the Tulane University School of Medicine. He served his residency at the University of Mississippi School of Medicine where he became chief resident the last six months of his training, and he completed his internship at Philadelphia General Hospital, Philadelphia, Pa.



Dr. Jackson

He was a National Cancer Institute research fellow at UMC for a year, instructor in the division of hematology at Tulane for a year, and also served a year as Public Health Service trainee at the Institute for Medical Genetics, University of Uppsala, Sweden.

A native Mississippian, Dr. Jackson returns to the University from Tulane University School of Medicine, where he has been serving as assistant professor of medicine. He has been a member of the Tulane faculty since 1963.

Gov. Appoints Thompson To State Mental Board

Dr. James Grant Thompson of Jackson has been reappointed to a six-year term as a member of the Board of Trustees of Mental Institutions by Governor Ross R. Barnett. His tenure will continue until March 17, 1968.

Dr. Thompson served as president of the Mississippi State Medical Association during 1951-52. He is a Fellow of the American Academy of Dermatology and Syphilology and a Diplomate of the American Board of Dermatology.

The Board of Trustees of Mental Institutions supervises the operation of facilities at Whitfield, Meridian, and Ellisville. Thomas Alewine of Brandon is chairman.

ACS Sets Sectional Meet

The Southern sectional meeting for surgeons is scheduled for March 16-19, 1964, in the Roosevelt and Jung Hotels and auditoriums of Charity Hospital, Louisiana State University, and Tulane University, New Orleans, La., according to an announcement by the American College of Surgeons.

The four-day Sectional Meeting will include comprehensive programs on general surgery, ophthalmic surgery, otolaryngology, plastic surgery, thoracic surgery, proctology, neurologic surgery, urology, orthopedic surgery, and gynecology and obstetrics.

Curtis P. Artz, Jackson; Richard Field, Centreville; James Hendrix, Jr., Jackson; Rush Netterville, Jackson; Thomas H. Blake, Jackson; Michael Newton, Jackson; J. H. Johnston, Jackson; and Watts R. Webb of Jackson are among the Mississippi physicians taking part in the various programs.

Other Sectional Meetings of the American College of Surgeons slated for 1964 will be a three-day session at the Denver Hilton Hotel, Denver, Colo., Feb. 17-19, and in Baltimore, Md. at the Lord Baltimore Hotel, Jan. 27-29. The 50th annual Clinical Congress will be in Chicago, Oct. 5-9.

Health Board Reports Illegitimacy Increase

Illegitimacy is on the increase in Mississippi according to a comprehensive compilation of 1962 vital statistics published recently by the Mississippi State Board of Health.

The board's Division of Public Health Statistics reports that in 1962, 8647 children, or 14.7 per cent of the children born to Mississippi residents were born out of wedlock. The figures for white babies were 444, or 1.6 per cent and for nonwhites were 8,203 or 26.1 per cent. In addition the Division states that 16.3 per cent of fetal deaths were illegitimate.

There were 58,921 live births in the state during 1962, one per cent less than in 1961 and the smallest number recorded since 1945.

Three-fourths of all births in the state were to young mothers ranging in age from 15 to 29 years.

Approximately 312 births were reported for mothers between the ages of 10 and 14 years.

UMC Seminars Slated For Eight-Week Series

Monday night seminars have been scheduled in eight-week series for physicians in the Jackson area. The hour long classes begin at 7:30 p.m. in the Research Conference Room at the University of Mississippi School of Medicine.

Under the direction of Dr. B. F. Banahan, Jr., acting assistant professor of preventive medicine, the seminars offer one speaker per week on a topic of current medical interest. Each week's course is complete in itself so that doctors who attend only occasionally can benefit.

The program is sponsored by the postgraduate education committee of the University of Mississippi School of Medicine, and the Mississippi Academy of General Practice which grants six hours of category 1 postgraduate credit for full attendance at each eight-week series.

Financial assistance from various drug companies makes it possible to offer the programs without cost to physicians. Education grant for the first eight weeks is from Ames Company, Inc.

Northeast Fetes 50 Year Members

Members of the Northeast Mississippi Medical Society honored 50 Year Club colleagues during the annual meeting at Tupelo on Dec. 10. Special guests of the society were dentists and their wives from the five county area surrounding Tupelo. Highlight of the occasion was a banquet attended by 175 persons at the Tupelo Country Club.

Fifty Year honorees included Drs. W. A. Aycock of Calhoun City, R. G. Dabbs of Shannon, E. K. Guinn of Okolona, Hunter L. Scales of Starkville, and B. C. Tubb of Smithville. A special honoree, inducted into the club during ceremonies at the banquet, was Dr. R. B. Caldwell of Baldwyn, past president of the state medical association.

Dr. Jack M. Senter of Belmont, 1962-63 president of the society, presided. Dr. Thomas W. Wesson of Tupelo, secretary, was in charge of local arrangements. Master of ceremonies for the occasion and the subsequent program was Dr. J. T. Davis of Corinth.

A three member panel discussed the topic, "The Professional Person Plans His Estate." Appearing were M. M. Winkler of Tupelo, a certified public accountant, who described the federal estate tax structure; John W. Nicholson, Jr., of Jackson, a life underwriter, who discussed the role of life insurance in estate planning; and Rowland B. Kennedy of Jackson, state medical association executive secretary, who spoke on the Keogh program.

New officers for 1964 installed were Drs. Eric A. McVey, Jr., of Macon, president; William B. Howard of Pontotoc, president-elect, and S. Jay McDuffie of Nettleton, secretary.

Tri-State Thoracic Meet Set For Jan. 10-11

The Eighth Annual Tri-State Thoracic Society Consecutive Case Conference is scheduled for Jan. 10-11, 1964, at the Buena Vista Hotel in Biloxi.

The meeting is sponsored jointly by the tuberculosis associations and thoracic societies of Mississippi, Louisiana, and Alabama as a part of their respective programs of medical education. Attendance is estimated between 85 to 100 physicians.

Out of state discussants of case presentations will include Dr. Sol Katz, chief of medical service, Mount Alto Veterans Administration Hospital and associate professor of medicine, Georgetown University, Washington, D. C.; Dr. Joseph W. Peabody III, Clinical assistant professor of surgery, Georgetown University, Washington, D. C., and Dr. Louis Raider, chief radiologist, Providence Hospital, Montgomery, Ala.

In addition to the guest discussants, each session will be moderated by one physician from each of the three state thoracic societies. These include Dr. Guy D. Campbell, Jackson; Dr. John H. Seabury, New Orleans, La.; and Dr. Ben V. Branscomb, Birmingham, Ala.

Program participants from Mississippi will be Dr. Thomas H. Arrington of Jackson who will present ten consecutive cases of histoplasmosis, and Dr. Jack Herring of Sanatorium, who will present ten consecutive cases of previously untreated pulmonary tuberculosis. Louisiana's program participants will include Dr. John B. Bobear of New Orleans, La., who will present ten perplexing pulmonary problems, and Dr. Morton Brown and Dr. Howard Buechner, both of New Orleans, who will present ten consecutive cases

of pulmonary tuberculosis in which drug hypersensitivity presented a problem. Alabama presentations will be made by Dr. Merril N. Bradley of Birmingham, who will present ten consecutive cases of previously untreated pulmonary tuberculosis and Dr. Edwaurdo Handal of Birmingham, who will present ten thoracic diagnostic problems of unusual radiographic interest.

This unusual and interesting form of scientific assembly for physicians has proven most popular in the field of respiratory diseases among chest specialists. Similar consecutive case conference type meetings are conducted as a part of the medical education program of tuberculosis association in other parts of the United States.

For further information regarding this meeting, please contact any officer of the Mississippi Thoracic Society or address your inquiry to Post Office Box 9865, Northside Station, Jackson, Miss.

Circuit Courses Slated For South Mississippi

The circuit course series for southern Mississippi, sponsored by the University of Mississippi School of Medicine, will be held at the Howard Memorial Hospital in Biloxi on Jan. 15, 22 and 29, and at the Methodist Hospital in Hattiesburg on Jan. 16, 23 and 30. All meetings will begin at 6:30 p.m.

At the first session, Dr. Samuel Johnson will talk about lesions of the fundus; Dr. William O. Barnett, associate professor of surgery, will discuss current practices in management of peptic ulcer; Dr. Forrest Tutor, assistant professor of neurosurgery, will describe neurosurgical emergencies; and Dr. Godfrey Arnold, associate professor of surgery, will review new trends in otolaryngology.

Pediatrics and ob-gyn faculty members who will speak at the second session are Dr. Karl Bolten, assistant professor, and Dr. Byron Inmon, associate professor of ob-gyn; Dr. Blair Batson, chairman, and Dr. J. Darrel Smith, associate professor of pediatrics. Topics to be discussed are cytology in gynecology and urinary stress incontinence in the female; pulmonary diseases in children, and advances in pediatric endocrine disorders.

Speakers at the final session will be Dr. Thomas M. Blake, associate professor of medicine; Dr. Herbert Langford, acting chairman of the department of medicine, and Dr. L. C. Hanes, associate professor of psychiatry. Their topics will be electrocardiographic interpretations, hometown hypertension, and depressive reactions in general medical practice.

Both postgraduate series carry Academy of General Practice category 1 postgraduate credits.

DEATHS

Beck, Otis Henry, Greenville. M.D., University of Tennessee College of Medicine, Memphis, 1923; member American Society of Abdominal Surgeons; died Nov. 17, 1963, aged 66.

Edwards, Isaac, Canton. M.D., University of Tennessee College of Medicine, Memphis, 1897; Emeritus member of MSMA and member of the Fifty Year Club; died Dec. 1, 1963, aged 90.

Lewis, Carl Edwin, Jackson. M.D., Tulane University School of Medicine, New Orleans, La., 1935; interned Shreveport Charity Hospital, La., one year; member American College Ob-Gyn; died Dec. 1, 1963, aged 54.

Rouse, Ernest Chester, Grenada. M.D., Memphis Hospital Medical College, Tenn., 1913; interned Natchez Charity Hospital, Miss., one year; died Nov. 14, 1963, aged 76.

Turner, Jewel Doris, Tupelo. M.D., Northwestern University Medical School, Chicago, Ill., 1930; interned Lutheran Hospital, St. Louis, Mo.; died Nov. 13, 1963, aged 58.

PERSONALS

Blair E. Batson of Jackson has been named to the committee of the Section on Child Development of the American Academy of Pediatrics. The committee is the executive body of the section whose membership includes pediatricians particularly interested in growth and development of infants and children.

CURTIS W. CAINE of Jackson has been elected vice president of the Citizens Educational Association, a newly organized group concerned with crucial problems in public school education in Mississippi.

EDLEY H. JONES of Vicksburg spoke recently before the Pan-Pacific Surgical Association Conference. The topic of his speech was "Ear Surgery."

ROBERT Q. MARSTON, dean of the University of Mississippi School of Medicine, has been reelected chairman of the professional education committee of the American Cancer Society, Mississippi Division. Others elected to chairmanships were JOSEPH G. MCKINNON of Hattiesburg, service committee; and HOWARD A. NELSON of Greenwood, legislative committee.

WILLIAM W. PEARSON, chief of anesthesiology, Jefferson Davis Memorial Hospital, recently presented two papers before the Mexican Congress of Anesthesiologists in San Luis Postosi, Mexico. The topic of his discussion was "Pediatric Anesthesia."

JAMES W. PRESSLER of Port Arthur, Texas, has announced the opening of his office for the general practice of medicine in McComb. Dr. Pressler received his medical degree from the University of Texas Medical Branch, Galveston, Texas, and completed his internship with the United States Public Health Service in New Orleans, La.

WALLACE S. SEKUL of Biloxi was recently elected president of the medical staff of Howard Memorial Hospital. He succeeds ELDON L. BOLTON also of Biloxi. Others named to the staff were: ROBERT F. CARTER, JR., vice president; PAUL L. HORN, JR., secretary-treasurer; and FRANK G. GRUICH, chief of staff.

EDWIN B. WERKHEISER was recently elected president of the Jackson Touchdown Club.

JAMES P. WOOD of State Line has announced the opening of his office for the general practice of medicine in Waynesboro. Dr. Wood received his medical degree from Tulane University School of Medicine, New Orleans, La., and interned at Charity Hospital, New Orleans, La.

Heart Assn. Will Hold Two-Day Symposium

"The Cellular Basis for the Action of Cardiac Drugs" will be the topic of a two-day seminar sponsored by the Heart Association of Southeastern Pennsylvania, Feb. 27-28, at the Sheraton Hotel in Philadelphia.

The first three sessions, "Structure and Function of the Myocardium," "Ionic Mechanisms," and "Energy Sources," deal with the heart muscle and how it works while the final session entitled, "Modification by Pharmacologically Active Agents," is concerned chiefly with how drugs influence these functions.

Speakers for the program are: Dr. David Spiro, department of pathology, College of Physicians and Surgeons, New York; Richard D. Keynes, Ph.D., Agricultural Research Council, Institute of Animal Physiology, Cambridge, England; Dr. Edmund H. Sonnenblick, cardiology branch, National Health Institute, Bethesda, Md.; Dr. J. Walter Woodbury, department of physiology and biophysics, University of Washington School of Medicine, Seattle; Dr. Victor Lorber, department of physiology, University of Minnesota Medical School, Minneapolis; and Annemarie Weber, Ph.D., Institute for Muscle Diseases, New York.

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Other speakers scheduled for the program include: Dr. Daniel C. Tosteson, department of physiology, Duke University, Durham; Robert E. Davies, Ph.D., University of Pennsylvania School of Veterinary Medicine, Philadelphia; Francis D. Carlson, department of biophysics, Johns Hopkins University, Baltimore; Dr. Brian F. Hoffman, department of physiology, State University of New York College of Medicine, Brooklyn; Dr. W. Wilbrandt, Pharmacology Institute, University of Bern, Switzerland, and Dr. Neil C. Moran, department of pharmacology, Emory University, Atlanta, Ga.

Additional information and reservations may be obtained by contacting the Heart Association of Southeastern Pennsylvania, 318 S. 19th Street, Philadelphia 3, Pa.

Ob-Gyn Board Sets Part II Exams

The American Board of Obstetrics and Gynecology has announced Part II examinations, oral and clinical, for April 27-May 2, 1964.

The entire board will conduct examinations at the Edgewater Beach Hotel in Chicago, Ill. Formal notice of each candidate's examination will be sent him in advance of the examination dates.

Candidates who have participated in Part I examination will be notified of their eligibility for the Part II examination on or before Feb. 1.

Current Bulletins of the American Board of Obstetrics and Gynecology outlining the requirements for application may be obtained by writing to Robert L. Faulkner, M.D., 2105 Adelbert Road, Cleveland 6, Ohio. All prospective candidates are urged to review the current requirements before applying for board examination.

Diplomates are requested to keep the board office informed of any changes in address.

Workshop in Teratology Scheduled for Feb. 2-8

The Commission on Drug Safety will sponsor a workshop in teratology at the University of Florida, Feb. 2-8, 1964, through a grant from the Pharmaceutical Manufacturers Association.

Impetus for the program was provided by the Commission's Subcommittee on Teratology, under chairmanship of Dr. Josef Warkany, professor of Research Pediatrics, The Children's Hospital Research Foundation, University of Cincinnati. The subcommittee's report cited establishment of the workshop as the first needed scientific step in avoiding such tragic episodes as that of thalidomide.

Forty participants and a limited number of observers will be admitted from such fields as obstetrics, pediatrics, toxicology, pharmacology, biochemistry, endocrinology, pathology, and others as determined by the admissions committee.

The workshop is aimed at familiarizing scientists from government, industry and the universities, with concepts and methodology used in studying congenital malformations. Breeding, dosage, evaluation of results, strain specificity in common laboratory animals, examination for deformities, clearing and related subjects will be considered.

Further information may be obtained from D. C. Trexler, Executive Director, Commission on Drug Safety, 221 N. LaSalle Street, Chicago 1, Illinois.

Health Coverage Shows 50 Million Increase

Health insurance protects 50 million more Americans today than it did 10 years ago. Over 141 million persons were protected against the costs of hospital care at the end of 1962, the Health Insurance Institute reported recently.

Ten years ago, only 91 million Americans were covered by hospital expense insurance, but since then the number has increased more than one and one-half times. In 1952, 59 per cent of the U. S. civilian population were protected by some form of health insurance while at the beginning of this year 76 per cent of Americans were so covered, stated the Institute.

According to the Institute's report, the same type of growth has been shown by other forms of health insurance. In 1952 over 72 million Americans had surgical expense insurance, but in the following 10 years there was an 80 per cent increase in coverage, and at the end of 1962 over 131 million persons had protection against the cost of surgical bills.

Regular medical expense insurance covered nearly 36 million Americans in 1952. However, there was an increase of more than two and one-half times in coverage in ten years so that more than 98 million persons were covered last year.

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Meeting, June 21-25, 1964, San Francisco, Calif. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn, Chicago 10, Ill.

American Academy of General Practice, April 11-16, 1964, Atlantic City, N. J. Mr. Mac F. Cahal, Volker Blvd. at Brookside, Kansas City 12, Mo.

American College of Surgeons, Clinical Congress, Oct. 5-9, 1964, Chicago. Samuel P. Harbison, Secretary, 40 East Erie, Chicago 11, Ill.

Mid-South Postgraduate Medical Assembly, Feb. 11-14, 1964, Memphis, Tenn. Mr. Leslie Adams, Executive Secretary, 774 Adams St., Memphis 5, Tenn.

STATE AND LOCAL

Mississippi State Medical Association, May 11-14, 1964, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday, January, First Wednesday, March, May, July, September, November. Charles N. Floyd, 1619-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Robert M. Graham, 612 Dixie Towers, Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. Robert B. Townes, Jr., 1196 Mound St., Grenada, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 420 Magazine, Tupelo, Secretary.

North Mississippi Medical Society, First Thursday April and October, Oxford. Marcus E. Morrison, 512 Van Buren Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucien Olen Crosby Memorial Hospital, Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.

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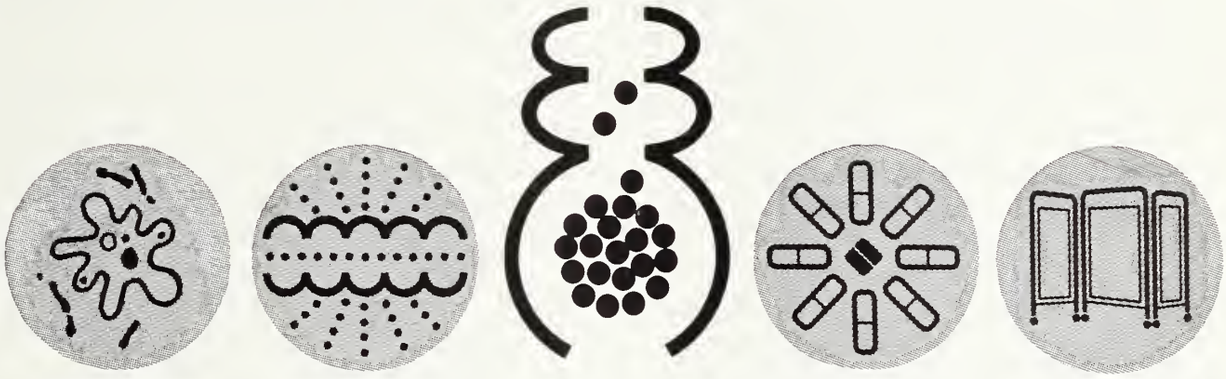

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It should be noted, however, that Lomotil has proved highly useful in mild to moderate ulcerative colitis and in several other refractory forms of diarrhea.

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Research in the Service of Medicine SEARLE

SMA President Names Three

Dr. Robert D. Moreton, Fort Worth, Texas, president of the Southern Medical Association, has announced the appointments of the following new members of the Council of the Association: Dr. Robert F. Sharp, New Orleans, La.; Dr. Howard A. Nelson, Greenwood, Miss.; and Dr. J. Hoyle Carlock, Ardmore, Okla.

Drs. Sharp, Nelson, and Carlock will serve for five years as members of the Association's governing body, taking active part in the business and scientific affairs of the 17,000-member medical group.

The Southern Medical Association, one of the largest general medical organizations in the country, embraces sixteen southern states and the District of Columbia. The Council is composed of one member from each of the sixteen states and the District of Columbia. Annually the Association holds a scientific meeting which draws an attendance of some 5,000 to 7,000 physicians. The Association also owns and publishes the *Southern Medical Journal* monthly and the *Southern Medical Bulletin,* a quarterly publication. Primarily a service organization for physicians, the exclusive purpose of the Southern Medical Association is to develop and foster scientific medicine.

AMA Will Offer Journalism Awards

The American Medical Association has announced a $5,000 medical journalism awards program "to recognize journalism that contributes to a better public understanding of medicine and health in the United States."

Awards of $1,000 each will be presented for outstanding reporting on health and medicine in five categories—newspapers, magazines, radio, television, and in newspaper editorial writing, said Dr. F. J. L. Blasingame, executive vice president of the AMA.

The awards are intended for recognition of outstanding reporting of the scientific and clinical aspects of medicine, Dr. Blasingame said. Awards will be presented for the first time in 1965, based on work published or broadcast during the calendar year of 1964.

Entries will be judged on a basis of accuracy,

increases blood flow to the brain in the "senility syndrome" associated with cerebrovascular insufficiency

significance, quality, public interest and impact. Entries will be judged by the 1964 Medical Journalism Awards Committee, which will include outstanding members of the publishing industry, radio and television industry and the medical profession, he said.

Entries may be sent to the 1964 Medical Journalism Awards Committee, American Medical Association, 535 N. Dearborn St., Chicago, Ill. Deadline is Feb. 1, 1965, although entries may be submitted at any time prior to that date.

Newspaper and magazine articles should be submitted in triplicate, validating date of publication and showing the material as it was presented to the public. Entries for radio or television should consist of three copies of the complete script and a 200-word summary of the script, together with film or kinescope of television entries and audio tape or transcription of radio entries. Entrants may make as many entries as they wish.

Each entry should be accompanied by a statement listing title of entry, writer or producer, publication in which the article appeared or station or network over which program was broadcast, date entry was published or broadcast, category for which entry is submitted, name, address and title of person submitting entry. Radio and television films, tapes or kinescopes will be returned if requested.

Categories of competition are:

Newspapers: For a distinguished example of a news or feature story or series in a United States newspaper of general circulation published daily, Sunday or at least once a week.

Magazines: For a distinguished example of an article or series in a United States magazine of general circulation published weekly, monthly, quarterly or at other regular intervals.

Editorial: For a distinguished example of editorial writing in a United States newspaper of general circulation published daily, Sunday or at least once a week.

Radio: For a distinguished example of reporting on medicine or health on a United States radio station or network.

Television: For a distinguished example of reporting on medicine or health on a United States television station or network.

The awards will not be given for work, however excellent, that involves primarily the relaying of medical knowledge to the medical profession and to allied professions. Members of the medical profession, medical associations and their employees are not eligible to submit entries.

Inadequate cerebral blood flow—often due to cerebral arteriosclerosis—may result in the "senility syndrome" with its pattern of mental confusion, memory lapses, depression, fatigue, apathy and behavior problems.[1-3]

43% increase in cerebral blood flow[4]

In patients with cerebrovascular insufficiency, Eisenberg[4] measured a 43 percent increase in blood flow in the brain following administration of Arlidin (nylidrin HCl) orally for more than two weeks beginning with a dosage of 12 mg. t.i.d. and increasing to 18 mg. t.i.d. There was a decrease in cerebral vascular resistance in most instances.

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REFERENCES: 1. Madow, L.: Penn. M. J. 62-861, June 1959. 2. Stieglitz, E. J.: Geriatric Medicine, ed. 2, Philadelphia, Saunders, 1949 p. 274. 3. Winsor, T., et al.: Amer. J. Med. Sciences 239:594, May 1960. 4. Eisenberg, S.: ibid, July 1960.

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Volume V
Number 2
February 1964

JOURNAL of the Mississippi STATE MEDICAL ASSOCIATION

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The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi; office of publication, 1201-5 Bluff Street, Fulton, Missouri. Subscription rate, $5 per annum; $1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

February 1964

Dear Doctor:

Nobody was surprised at the Public Health Service report on tobacco and health, but the story behind the story is intriguing and paradoxical. Overtones, as expected, are strongest in areas of economics and politics. Newsletter, in effort to define forces working for and against scientific aspects of issue, has rounded up facts, circumstances, and reactions for this special report.

Indications are that the medical profession generally accepts report as valid, because the evidence is considered too substantial to ignore. Formal reactions of medical associations have been guarded - except for those states which have already taken position of causal relationship between smoking and disease. From AMA down, report has been respected and a call for stepped up research has been made.

Tobacco manufacture, especially cigarettes, is big business in U.S.A., highly significant in public and private sectors of economy. Facts are:

Cigarette makers rank in top 10 per cent of domestic corporations. The big five - American, L & M, Reynolds, Lorillard, and Philip Morris - are big on the Big Board.

Industrial economies of tobacco states are closely tied to cigarette manufacture. Kentucky, North Carolina, and Virginia would literally hit the skids if tobacco consumption were significantly lowered.

Agricultural economy of Atlantic states from north edge of Florida to Maryland revolves around tobacco. Unlike other major staple area crops - cotton and wheat, for example - tobacco is largely marketed, processed, stored and manufactured where it's grown.

The tax bite on tobacco products is enormously important to federal and state governments. In Mississippi, 10.62 per cent of all revenue is from tobacco tax. That's $32.5 millions, third biggest revenue item.

The 387 page report said what the health hazards of smoking are but made no recommendations for "appropriate remedial action" it urged. Two bills just introduced in Congress would give federal government jurisdiction over tobacco advertising and require product labeling to warn consumers of hazards.

Most federal agencies are proceeding cautiously on doing anything about report because of ominous economic and political overtones. Public Health Service wants to step up public education on hazards but reports no such program is in preparation. VA is discouraging cigarette distribution in its 169 hospitals, and Air Force prohibits gifts of cigarettes to its medical facilities.

> Biggest paradox is what's going on along Independence Ave. in Washington. At Department of Agriculture, crop subsidizers are happily writing checks to tobacco farmers in $45 million program. A few blocks away, USPHS is seriously concerned about health hazards of a government-supported consumer product. Internal Revenue and Bureau of Budget also have obvious "conflicts of interests."

Across the Potomac, the National Institutes of Health are deeply involved in carcinogenesis research. Spokesmen say main effort, apart from overall cancer investigations, is addressed to finding mechanism by which tobacco causes damage and what specific components in smoke are responsible.

Federal Trade Commission, the consumer products watchdog, may be first agency to act in anti-smoking campaign. Two regulatory programs getting scrutiny are:

> Advertising restraints to take the romance out of cigarettes. Especially would this apply to endorsements by athletes and equating smoking with masculinity.
>
> Requiring statement by tobacco men of product's health hazards. Just whether this would be a labeling or advertising mandate isn't clear, but FTC powers are broad enough to apply to either, experts say.

Reactions to smoking report ranged from expressions of deep concern to ludicrous acts. Eastland, Texas, town council passed ordinance making possession or use of cigarettes offense for $1,000 fine or three years in jail. British reaction to report was said to be much more serious than that in U.S. A German scientist said he'd release report of 28,000 autopsies proving cigarettes don't cause cancer. Tobacco shares on NYSE held, Dow-Jones averages hover near record highs, and cigarette makers' dividends are on schedule.

Sincerely,

Rowland B. Kennedy
Executive Secretary

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
February, 1964, Vol. V, No. 2

ORIGINAL PAPERS

Contraceptive Methods, Present Status and Future

ROBERT V. BARNETT, M.D., and WILLIAM M. DALY, M.D.
Birmingham, Alabama

The perfect contraceptive, writes the author, would be (1) entirely effective, (2) safe and totally unproductive of complications, (3) simple and easy to understand, (4) within the economic means of the patient, (5) aesthetically inoffensive, (6) available at all times, and (7) divorced from the sexual act. Unfortunately for the public problems of many nations and the private problems of many families, no currently available method meets all of these criteria. The author considers the present contraceptive practices in terms of these criteria. In conclusion, he discusses the use of intrauterine rings in the Planned Parenthood Clinic of the University Hospital, Medical College of Alabama.

CALCULATIONS CONCERNING the outcome of the currently popularized "population explosion" have been freely advanced since the end of the 18th century, when Malthus gloomily predicted that food production could never keep pace with the population's need for it and suggested that a short thousand years hence one person would exist for every square yard of the earth's surface.

Food for sober thought unquestionably lies in these calculations. Knowledge that vastly overpopulated-undeveloped areas of the world will double their population in a mere 30 years as the result of the precipitously declining death rates and ever-rising birth rates, that between 1950 and 1960 the U. S. population rose 20 per cent (nonwhite 26.7 per cent, white 17.5 per cent), and that 1,800,000,000 people in the world are now underfed is scarcely tempered by the recent technological advances in the more progressive nations that might potentially satisfy the world's material needs.

Yet these conditions are not the salient problems with which the practitioner deals as he confronts the 27-year-old mother of five or the harried 22-year-old wife who has borne three children in as many years and whose sexual adjustment is totally disrupted by fear of still another pregnancy. Nor are they particularly germane as he considers the plight of the irresponsible, unconcerned female who repeatedly bears children out of wedlock, or the wishes of the intelligent, ambitious, thoughtful couple who simply desire to

From the Department of Obstetrics and Gynecology, University of Alabama Medical Center.
Read before the Section on Obstetrics and Gynecology, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

space their offspring for socioeconomic reasons, medical, eugenic or psychiatric indications, or personal preference of any origin. His dilemma is not materially aided by a careful perusal of recent or old obstetrical and gynecological texts, because only a scattered few offer as much as a brief sketch of the technique involved in applying a contraceptive method to a patient, and nothing concerning requirements for making the method acceptable to both the patient and her husband.

The perfect contraceptive would be entirely effective, permitting no unplanned pregnancies, safe and totally unproductive of complications; further, it should be simple and easy to understand as to method. It must be within the economic means of the patient, aesthetically inoffensive, available at all times, and the more divorced from the sexual act itself, the better.

COITUS INTERRUPTUS

Coitus interruptus is the oldest contraceptive practice and will be found widely practiced in our society, although most couples will not volunteer this information. Its sole advantage is availability. It is said to create gross psychosexual problems, especially for the female, but it requires no vivid imagination to envision a couple's mutual dissatisfaction with the method. It certainly requires a highly motivated male consort, a variable much more often absent than present, to establish a low pregnancy rate. Pearl reported in 1932 a pregnancy rate of 10 among 2,000 white protestant couples with 547 years of exposure using coitus interruptus. Pregnancy rate is defined as

$$R = \frac{\text{No. of Pregnancies X 1200 Months}}{\text{Months of Exposure}}$$

i.e., pregnancies per 100 woman years exposure. Average pregnancy rate without contraception is reported to be 80, with a range of 60-100.

The rhythm method, utilizing the "safe period" of the cycle, is perhaps most notable for its unreliability. It is the only method other than abstinence with approval of the Catholic church and does not have unqualified approval from this body unless needed for medical or other approved reasons. Its success hinges upon cycle regularity, a state that rarely obtains continuously. When instructing a patient in this system, the maximum-minimum cycle lengths must be ascertained by careful history over a period of at least one year, and 14 days subtracted from each extreme to determine the maximum-minimum day of ovulation, by past performance, for the individual. Emphasis must be placed on the fact that the 14 day constant is between ovulation and succeeding mense, not between mense and succeeding ovulation. Abstinence is advised during this period of usual ovulation, plus three days minimum on either side of this period to allow for unusual cycle irregularity. An additional two days must be excluded from sexual activity at the beginning of the fertile period because of the ability of the sperm to live and fertilize the ovum an estimated 48 hours after deposition. The egg survives at the end of the fertile period a bare 12 hours and no such allowance is necessary there. Thus, in a 25-29 day cycle pattern, abstinence between the 6th and 18th day would be required, a period so long that the woman must be exceptionally motivated to assure success. Extensions of this technique utilizing basal body temperature or increase in glucose concentration of cervical mucous are largely useless because ovulation closely coincides with the appearance of the positive indication in either test. Viable sperm capable of fertilizing the ovum may at that time be lying in wait for it. A pregnancy rate of 14 has been reported.

CONDOMS

In our society, condoms are likely the most widely used of all techniques because they are readily available, cheap, require no instruction for use, and are effective, with pregnancy rates of 7-11 resulting. Made from various natural animal tissues and synthetics, the male dislikes them because of real or imagined decrease in tactile perception, and again, the male becomes the responsible partner providing the motivation for success. No small number of women complain of introital irritation, made worse in the presence of inadequate lubrication. Leakage or rupture is most often associated with use of petroleum products for this purpose, and caution must be given to use either a contraceptive cream-jel or surgical lubricating jelly if such is needed.

Douches are reputed to carry the highest pregnancy rate, estimated at 20-30. Use of a high pressure (hand control) vinegar douche can be effective only if sperm have not ascended the cervical canal; they have been identified here within 1½ minutes after intercourse, a fact which explains the high pregnancy rate.

Jellies, creams, suppositories, and lately aerosol foam preparations have been used, with rates as low as 2.0-4.3 in one report where constant use was claimed. The patient must understand that sufficient time must elapse for suppositories to melt completely, and they frequently complain of perineal lathering, excessive lubrication which may also trouble the male, or they may simply describe them as being "messy." From the aesthetic standpoint the aerosol foams seem superior.

DIAPHRAGMS

While a diaphragm with gel has until recently been considered the most effective method available by physicians generally and is widely used, it appears that many women simply accept it; they dislike it only in varying degrees. Many women detest its insertion and removal. For certain classes of people its proper use is never comprehended, and it may not be immediately available at the critical moment of need. Certain anatomic deviations such as cystourethrocele, uterine prolapse, or retroversion may preclude its use. Unquestionably, it holds the distinction of requiring more time, effort, and motivation than any other method.

Masters and Johnson,[5] studying the anatomy of the pelvis and vaginal barrel visually utilizing a technique of artificial coitus, observed that the upper two-thirds of the vaginal barrel greatly expands before and during the orgasmic phase of the sexual response. This permitted a diaphragm fitted in the usual manner to be displaced either to the front, behind, or to the side of the cervix, to sometimes move freely with penile thrust about the vagina and from behind the retropubic placement, in which case hurried and inopportune reintromission often placed the penis above, rather than below, the diaphragm. This is a plea for fitting the largest diaphragm that the patient is unable to detect when it is in place.

After fitting, the spring should rest securely behind the symphysis; levator tone at the initial postpartum exam may be insufficient to hold this position. Kegel's exercises may correct this atony, since these strengthen the pubococcygeus-rectalis fibers appreciably. Marked cystourethrocele requires another contraceptive method. Severe uterine prolapse and marked retroversion with fixation may preclude use of a diaphragm, although simple retroversion does not. While still on the examining table the patient should be allowed to mount the diaphragm on the introducer, shown how to load the gel by filling the grooves on the upper surface and coating the rim. She should then insert it under the physician's observation, directing it first in the axis of her trunk and then 45° posteriorly to the small of her back. By this, the posterior rim will reach the posterior vaginal fornix. Placement of the anterior rim behind the symphysis should be checked, and she should be assured that her placement was correct. If she is allowed to then remove the diaphragm, anxious moments will be avoided when she first attempts removal at home.

After this introduction to the diaphragm the patient's reaction may be, almost palpably, that its use is too involved and troublesome for its worth. Gently point out that after using the method a dozen times, familiarity will reduce its complexity. One may also weigh for her the obvious point that any contraceptive program is going to demand of her some effort in exchange for relief from the burden of another pregnancy.

One should encourage the patient to exercise skill in anticipating the need for her diaphragm so that its insertion is separated as far as possible from sexual activity per se. She must be inculcated with the importance of invariably using the device, and to the hazard of intromission prior to insertion of the diaphragm. Occasionally a patient finding the gel supply exhausted will use the diaphragm alone, a practice to be warned against. Finally she must be advised to leave the diaphragm in situ for at least six hours after intercourse and warned against douching prior to that time. Thorough, meticulous instruction is the keynote of success; spare nothing to have the patient completely understand the mechanics and philosophy of the diaphragm.

OVULATION SUPPRESSION

Suppression of ovulation with natural and synthetic estrogens has been possible for quite a long time and appears to be a natural for fertility control. Lack of an orally active progestational agent to mature and cause orderly shedding of the endometrium at completion of the cycle, a tendency of ovulation inhibition to "escape" in prolonged treatment with these substances, undesirable side reactions, cost, and a natural reluctance to possibly disrupt the orderly endocrine mechanisms of the body prevented widespread use of estrogens for contraception alone. The advent of the synthetic 19-nor-steroids which overcame these objectionable features other than the last has led to widespread use of these compounds for fertility control with truly astounding results.

However, proof of suppression of ovulation as the mechanism of action is not firmly established.

Norethynodrel is known not to block ovulation in the rat;[4] examination of the rat's ovaries reveals recent corpora lutea after the drug's administration, while the animal does have in this circumstance infertile mating. Nonovulation as a direct effect of the 19-nor-steroids on the ovary could be brought about by damage to the germ cells, but Rock studied human ovaries serially before and after administration and could distinguish no change in terms of absolute number of follicles or number of atretic follicles. These patients had only one to three medicated cycles, and recently atretic follicles may not be easy to distinguish microscopically. Damage to germ cells is unlikely, but unproved. It may also act directly on the ovary by decreasing sensitivity of the follicular system to gonadotrophins; hypophysectomized rats protected by the gestagens shed less ova when given exogenous pituitary gonadotrophins when not protected.

Inhibition of ovulation is difficult to measure. Basal body temperature, vaginal cytology, and endometrial biopsy are meaningless due to the effects of the drugs themselves. At laparotomy and microscopically, interpreting the age of corpora lutea is inaccurate, rupture points of follicles are indiscrete, and ova are difficult to recover.

Norethynodrel in animals effects an increase in size of the anterior pituitary and changes the cellular pattern. Estrogen does also, decreasing the numbers of acidophilic and basophilic cells (degranulation) and increasing chromophobes. These changes can be interpreted as evidence of decreased pituitary activity. Norethynodrel 10 mg. plus 0.15 mg. 3-methoxy-estinyl estradiol and a half strength 5-.075 mg. tablet is marketed as Enovid, and norethindrone 10 mg. plus 0.05 mg. of the same estrogen as Ortho-Novum. It is almost agreed that suppression of the pituitary's gonadotrophic activity by the estrogen of the 19-nor-steroid is the key to induced infertility, but direct measurement of these trophic hormones is so inaccurate as to be useless.

Experiments with rabbits suggest that damping of hypothalamic activity is induced by the 19-nor-steroids, as it relates to coitus-ovulation; a similar relationship could conceivably exist in the human, decreasing pituitary activity via the hypothalamus. There also exists the possibility that the 19-nor-steroids circumvent pregnancy by creating a hostile cervical mucous or endometrial environment unfavorable to nidation. The endometrial changes induced are not fully secretory; glandular changes develop to a point comparable to the 16th to 17th day of a normal cycle and regress, while the stroma develops edema and pseudodecidual changes, finally resembling early pregnancy while the glands show advanced regression.

Regardless of the modus operandi, these compounds are of proven efficacy in preventing pregnancy. Where no tablets were omitted, pregnancy rates of zero have been obtained, with collected rates as low as 0.05. Nuisance side effects are more prevalent with Enovid than with Ortho-Novum, presumably because of its higher estrogen content, but the cost of Ortho-Novum is double that of Enovid, which is effective in the 5 mg. dose. These complaints are those so familiar to early pregnancy, namely, nausea, vomiting, lassitude, fatigue, full and tender breasts, bloating, weight gain, and sometimes diminished libido, plus aberrations in the menstrual pattern. The latter changes include amenorrhea (silent menstruation), decreased flow and/or short periods, intermenstrual bleeding (10-15 per cent), and on rare occasions heavier menses. Altogether, about 25 per cent of Enovid users are reported to discontinue the drug because of side effects, while less than 5 per cent on Ortho-Novum do so.

Medication should be started on the fifth day of the menstrual cycle, or if begun at a six to eight weeks postpartum check, it may be started before menses have resumed. In this case warning must be given that sterility will not be assured until seven to nine days have passed, in which time ovulation will have been suppressed or will have occurred. The patient may be told of some side effects and informed that they will diminish successively with each cycle's passing. A system for marking the consumption of each day's pill is helpful, and the importance of not omitting tablets must be emphasized. Attention is called to the possibility of nonoccurrence of menstruation after completion of the 20-day cycle, with clear instructions to restart medication on the eighth day after the last tablet in the prior cycle was taken. Reassurance is given that pregnancy will not have occurred.

There is no evidence that the 19-nor-steroids interfere significantly with lactation, cause thrombo-embolic phenomena or virilization of the fetus in case of a medicated pregnancy, nor have measurable deleterious effect on the body's intricate endocrine mechanisms. No increased incidence of genital or breast malignancy has been reported. Whenever administered for contraception, the

drugs are cycled, 20 days on, 8 days off. The suggestion has been made that medication be discontinued after a continuous two-year span of usage and then to rely on another contraceptive method while spontaneous cycling demonstrates its normalcy. The first or first few spontaneous menses may be delayed (long cycles), but pregnancy is said to occur more quickly than average when attempted after withdrawing the drug.

In summary, these two 19-nor-steroids seem to fulfill nearly all requirements for the perfect contraceptive, especially if the cost of norethindrone can be reduced so that the benefit of its low incidence of side effects can be fully utilized. A patient needs minimal motivation to take a single pill a day.

INTRAUTERINE RINGS

In the past five years considerable interest has been regenerated in the use of intrauterine rings as contraceptive devices. Grafenberg, in 1928, reported on his experience with the Pust pessary, consisting of a glass or hard rubber plate held against the cervix by a silk thread attached to an intrauterine ring of silkworm gut. Accidental loss of the plate was observed not to impair the effectiveness of the method. He later used a simple intrauterine silver ring without attachments. Oppenheimer used a silk ring, then silver, and returned to silkworm gut when removal of a silver ring induced severe bleeding. Silver tends to embed into the endometrium and/or myometrium and is not widely used at present.

Haire in London and Leunbach in Denmark abandoned use of the rings because of failures and two cases of severe pelvic infection. Such opposition to the procedures arose that the use of rings fell into disrepute. Oppenheimer continued to use them and recounted his 30 years' experience in 1959,[6] dealing with over 1,000 insertions without serious complications and a pregnancy rate of 2.4. A large number of modifications of the original ring have now been tried, with inconsistent results, but many reports cite results comparable to those of Oppenheimer with pregnancy rates in the range of 0.6 to 7.5. The higher figure is comparable to the over-all rate using diaphragm and jel.

Since their inception the design of intrauterine devices has been changed by several investigators and new materials have been utilized. The Oppenheimer modified ring is constructed of four strands of monofilament nylon twisted into a superimposed 3-loop ring held together by a silver wire clip. The Margulies Permaspiral is a flat, linear polyethylene spiral of 2.5 turns with beaded tail that protrudes through the cervix when in position, and the Lippes loop is constructed of similar material in a running "S" configuration, broader at the top than at the bottom, where a 4-0 nylon filament is attached to hang through the cervix and into the vagina. The Hall-Stone ring is a stainless steel spring coil made into a ring 22 mm. in diameter, containing in the coil a 3-0 dermalon filament, and has no vaginal tail. The most recent innovation consists of a small and a larger triangle joined at their apices, designed by Birnberg.

These modifications are directed towards increasing ease of insertion, removal, handling, sterilization, avoidance of spontaneous ejection or "dropout," ease with which ejection can be detected, adaptation to the shape and size of the uterine cavity, and attaining minimal tissue reaction to the device's presence, especially avoidance of embedding.

These devices yet present many problems in their use. The most annoying is spontaneous ejection, brought about by uterine contractile activity or relative cervical incompetence, most commonly observed in parous women at or about the menstrual period and in the first few postpartum months. Incorporation of barium into the structure of the ring, or fixing it to a metallic attachment, permits radiographic check on position, and a vaginal tail that can be observed by the physician or palpated by the patient are designs to circumvent nonrecognition of "dropout." This complication has been reported in less than 5 per cent of users (Lippes loop No. 2). Abnormal vaginal bleeding occurs frequently and may be troublesome, especially in the first month. Vague or crampy lower abdominal pain, leucorrhea, and infection have been reported. Some suggest that alleged endometritis is sterile and represents foreign body reaction. A scattering of serious pelvic infections, uterine perforations, with or without loss of the ring intra-abdominally are reported also. An appreciable number of pregnancies occur with the ring in place and proceed to term, but in no cases were fetal abnormalities recorded thought to be due to the ring's presence.

The mechanism by which pregnancy is prevented is not clear. The foreign body may increase tubal motility, bring the fertilized ovum to the uterus before it is ready to implant or before the endometrium is prepared to receive it; it has been suggested that the ovum may cling to the multiple nylon strands in this type ring. Factors which

might alter ascent of the sperm are induced hostility of the cervical mucous and increased intrauterine alkalinity as the consequence of the chemical content of the ring itself or of a wicking effect of the trailing tail pulling cervical mucous into the cavity. The moralists speculate that the ovum nidates, but is aborted by the foreign body. Decidual reaction which should accompany such a mechanism is conspicuously absent when compared to its frequency in control subjects using late cycle hysterectomy specimens and endometrial biopsy.

Contraindications to the insertion of these devices are the presence of fibromyomata, acute or subacute pelvic inflammatory disease, carcinoma of the genital tract, recent history of abnormal menstrual patterns, and the final one-half of the menstrual cycle in which pre-existing pregnancy could be suspect.

ALABAMA STUDY

The indigent clinic population at University Hospital, Alabama Medical College, requires for the most part a method of contraception that is not only cheap, simple to use, and effective, but one that is operational at all times and places, and does not require great patient motivation, nor cooperation of their consorts. A study of intrauterine rings was undertaken by Dr. Daly with the advice of the staff and help of the Planned Parenthood Association in August 1962. No attempt to analyze this data will be made, although about 175 patients have been fitted with the Oppenheimer-Grafenberg ring and a further modification using heavier nylon, Lippes loop, and the Hall-Stone ring.

With the earlier model of the Grafenberg ring available to us, the ejection rate was so great that an adaptation utilizing heavier nylon was obtained with great improvement. An estimated 10 per cent fall out was still noted, and Lippes loop was used with further improvement. At present the Hall-Stone ring is being used, some 75 having now been inserted, with only two ejections; one of these was predictable because of an obviously incompetent cervix. Most ejections occur in the incompletely involuted uterus.

Another problem in our clinic not referred to in the literature is that a large number of patients are quickly lost to follow-up, with status of the rings unknown. This happened to one-third of the initial 42 patients fitted. A few rings have been removed because of bleeding, pain, or inability of the patient to trust the device, but no infections have been encountered thus far, nor uterine perforation. Two patients are pregnant with rings in place, and one patient is believed to have aborted with passage of the ring, but did not come in immediately and this point could not be proven.

Attempt has been made to keep the technique for introducing the ring simple. The patient is examined to determine uterine involution, position, and to rule out pelvic infection. A Papanicolaou smear is made. The cervix is grasped with a tenaculum and cleaned with aqueous zephiran, sounded and the device previously sterilized by appropriate method introduced. The cervix may be gently dilated if necessary, which is usually not the case in multiparas. Patients are instructed to abstain from intercourse or douches while spotting or cramping following insertion and are rechecked in two months to determine the presence of any side effects and whether or not ejection has occurred.

The patients in our clinic apparently like the idea of this device, and the number approaching the Planned Parenthood Clinic for fitting in recent weeks is nearly becoming burdensome. The gratitude and delight expressed by patients with properly functioning rings is convincing evidence that they have a place in family planning. When one considers the community financial and sociologic dilemma posed by the problem of unwanted and often illegitimate children, as well as the morbidity and sometimes mortality associated with the approximately 1,000,000 criminal abortions performed yearly in this country, it behooves all of us as physicians to attempt in some way to make every child a wanted child. ★★★

2018 South 15th Ave. (Dr. Barnett)

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Legal Problems in Human Sterilization

BERNARD D. HIRSH, LL.B.
Chicago, Illinois

THERE ARE FEW SUBJECTS more packed with controversy and human emotion than sterilization. Depending upon the point of view, human sterilization is immoral, it is necessary to improve the quality of the human race, it is the answer to the "population explosion," or it is the ideal contraceptive to make sex life convenient without fear of procreation.

As a lawyer, I am most interested in human sterilization as it affects the individual's civil and human rights and as it relates to the legal liability of the doctor.

Sterilization is often incidental to corrective surgery performed for other reasons. Where a surgical procedure is likely to cause sterility, the surgeon, of course, should so advise the patient. A few years ago, a 65-year-old man sued his surgeon because he was not told that his spermatic cords would be cut in a transurethral prostatic resection. The court held that the surgeon was obligated to inform the patient of his intention to sever the patient's spermatic cords.

This discussion, however, is limited to procedures performed for the primary purpose of producing sterility.

THREE CLASSIFICATIONS

The legal problems which may arise in connection with a sterilization procedure depend to a large extent upon the reason for which it is undertaken. If it is performed to prevent the conception of children who are likely to be physically or mentally defective, it is called eugenic sterilization. If the procedure is performed to preserve the life or the health of a patient, it is called therapeutic sterilization. If a sterilization is performed for any other reason, such as conception, it falls into a third class.

EUGENIC STERILIZATION

The founder of the eugenics movement was Sir Francis Galton. He coined the term "eugenics" from a Greek word meaning "well born."

In 1904, Sir Francis Galton officially launched the eugenics movement with a twofold aim: (1) positive eugenics—the encouragement of the propagation of the biologically fit, and (2) negative eugenics—the discouragement of the reproduction of inferior stock.

At the same time, the laws of heredity formulated by the Austrian monk, Gregory Mendel, were rediscovered some 40 years after their original publication. Although Mendel's work had been confined to plant life, his laws of heredity were seized upon as being applicable to human beings.

The proponents of this view decided that mental illness, mental deficiency, epilepsy, criminality, pauperism, and various other defects were hereditary. Based upon the premise that these various conditions were hereditary, there was considerable agitation for corrective action. Since attempts at cure were considered futile for hereditary defects, preventative measures appeared to be the only way to eliminate these conditions.

Coincidental with the rediscovery of Mendel's laws at the beginning of this century, Dr. Harry C. Sharp, who was affiliated with the Indiana

The subject of human sterilization carries moral, political, and legal overtones. In the paper, the author concentrates on sterilization from the legal standpoint as it affects the individual's civil and human rights and as it relates to the liability of the physician.

Director, Law Department, American Medical Association.

Read before the Section on Obstetrics and Gynecology, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

State Reformatory, developed a new method for sterilizing males, the vasectomy. At approximately the same time that Dr. Sharp developed the vasectomy, the now standard method of sterilizing females, the salpingectomy, was discovered in France. Experience has demonstrated that neither of these procedures are hazardous under modern surgical conditions nor do they materially reduce sexual powers.

At the present time, 28 states have eugenic sterilization laws, 26 of which, including Mississippi, are compulsory. The involuntary procedure is usually commenced by an application from the superintendent of the institution to a designated administrative agency which has the authority to grant a sterilization order.

In those states that have eugenic sterilization laws, the physician authorized to perform the operation incurs no personal liability if the operation is performed in accordance with a valid law and without negligence.

THERAPEUTIC STERILIZATION

Therapeutic sterilization usually refers to a voluntary operation specifically performed for the purpose of preserving the life or health of a woman whose life would be endangered by pregnancy.

In Connecticut, Kansas, and Utah, it is a crime, by statute, to sterilize any person without eugenical or therapeutic justification. In March of this year, a bill was introduced in the Kansas legislature which would permit sterilization for nontherapeutic as well as therapeutic reasons. The bill was defeated less than three weeks after it was introduced. Therefore, in Kansas as well as Connecticut and Utah, it is still a crime for a physician to perform a sterilization operation solely for reasons of the patient's convenience.

In the absence of a statute on the subject, legal authorities are in disagreement as to whether nontherapeutic sterilization is legal. Frequently, the views of attorneys on this subject are colored by their personal religious and moral beliefs. Some lawyers opposed to nontherapeutic sterilization say that the removal of healthy tissue is mutilation and therefore constitutes the crime of mayhem. Others rely upon the catch-all reason of public policy. What is or is not contrary to public policy depends upon the moral sentiment of the people as expressed through their legislature or judiciary.

Lawyers are not the only ones who differ in their views about sterilization. Besides the clergy, physicians themselves are divided in their opinions. Some physicians hold that sterilization when performed on a healthy patient is a violation of the Hippocratic Oath. In Virginia, the first and only state to adopt a statute intended to permit nontherapeutic sterilization, the proponents of the law argued that: "With the world population explosion and the increasing cost of living, we do not think that the medical profession has a right to make this decision for patients on any theological grounds."

It is my understanding that even before the enactment of the law in Virginia in 1962, sterilization in that state for reasons of convenience was not uncommon. Since there was no statutory prohibition of voluntary sterilization, many physicians with the support of considerable legal opinion were not hesitant in engaging in such procedures. However, the proponents of the legislation felt that voluntary sterilization should be clearly recognized under the law.

The Virginia statute is the prototype of bills that were introduced and defeated in Kansas, North Carolina, and West Virginia. In all likelihood, similarly worded bills will be introduced in other states within the next few years.

The Virginia statute provides that it is lawful for a physician, acting in collaboration or consultation with at least one other physician, to perform a vasectomy or salpingectomy, provided the following conditions are met:

1. An adult seeking the operation will have to request it in writing at least 30 days before it is performed.
2. If married, his or her spouse will have to join in making the written request.
3. The operation must be performed only in a licensed hospital.
4. Prior to or at the time the written request is made, the physician must make a full and reasonable medical explanation of the meaning and consequences of the operation.
5. Subject to court approval and a 30-day waiting period, a sterilization operation may be performed on a minor who has hereditary mental illness, mental deficiency, or epilepsy.

A great deal of publicity has been given to the Virginia statute because it is supposedly specific in authorizing nontherapeutic sterilization. Actually, the law deals with the requirements for performing a vasectomy or salpingectomy without

reference as to whether the purpose is therapeutic or nontherapeutic. This means that a physician in Virginia must follow the statute in either case.

Marital cohabitation is not conducive to abstinence, and physicians might question the wisdom of a 30-day waiting period where there is a bona fide therapeutic reason for sterilization.

Every new statute presents questions of interpretation no matter how clearly the legislative draftsmen think they have expressed themselves. When you impose a legal restriction on the physician's freedom to practice medicine and prescribe a procedure which he must follow to stay within the law, you also increase his vulnerability to suit for malpractice.

Assume that in Virginia a young man requests a vasectomy and represents that he is unmarried. Thirty days later, the operation is performed. Later, his wife turns up with a lawyer and a suit for $100,000, claiming that she is newlywed and that the doctor is responsible for depriving her of motherhood. The law clearly states that the spouse must join in requesting a sterilization operation. It is anybody's guess as to what a court or jury might do in awarding damages, particularly if the doctor could have but made no effort to check whether his patient was single or married.

BREACH OF CONTRACT SUITS

In California, Minnesota, and Pennsylvania, suits have been brought against physicians for breach of contract because pregnancy of the wife followed the performance of a vasectomy. In each of the cases it was alleged that the doctor guaranteed sterilization. In none of the cases was nontherapeutic sterilization held to be contrary to public policy. Also, each of the holdings was in favor of the physician because the plaintiffs were unable to show damages in the normal birth of a normal child. It is interesting to speculate as to what might these courts have held if the child born had been crippled or an imbecile or if the mother had suffered severe injury or even death during childbirth.

There is, however, a warning in these cases which the physician must recognize. In a breach of contract action, all that the plaintiff must prove is the physician's failure to achieve a result that he warranted. If a physician guarantees that the patient will be sterile following a vasectomy and instead the patient's wife becomes pregnant and as a result dies, the legal liability might be substantial.

Obviously, no reputable physician will guarantee the result of any treatment, but patients sometimes misconstrue a physician's words when it suits their purpose. A jury may choose to believe the patient and not the physician. For this reason, no physician should undertake a sterilization operation without a written consent which acknowledges that sterilization is *not* guaranteed. The consent form should also explain in lay language that a sterile person is incapable of becoming a parent, and it should be signed by both husband and wife.

Until declared legal or illegal by the legislature or courts in the physician's state, nontherapeutic sterilization is largely a matter of individual conscience and principle. With regard to civil damages, sterilization does not present any greater exposure to liabiltiy than any other procedure alleged to have been negligently performed. One possible exception is the case where the physician neglects to obtain the consent of the patient's spouse. The question has not been litigated, but an argument could be made that husband and wife have a mutual interest in each other's powers of procreation and the consent of both is therefore essential before the ability of either to procreate is terminated for nonmedical reasons.

In jurisdictions where sterilization of convenience is a crime or contravenes public policy, a patient who voluntarily submits to the procedure could be barred from recovering damages for a bad result on the ground that the patient is party to an illegal transaction. This has been the holding in many cases seeking civil damages arising out of criminal abortion, but some jurisdictions have permitted recovery where medical malpractice is proven.

CONCLUSION

Outside of the three states where nontherapeutic sterilization is expressly prohibited by law, the physician who performs these procedures does not expose himself unduly to civil or criminal liability.

As to the ethical issues of nontherapeutic sterilization, the *Principles of Medical Ethics of the American Medical Association* are silent. The physician must look to his own conscience. If the physician chooses to perform sterilization operations which merely suit the patient's convenience, he still has the ethical obligation to exercise his discretion in the patient's best interests. ★★★

535 North Dearborn St.

Radiologic Seminar XXII: Appendiceal Calculi

JAMES M. PACKER, M.D.
Jackson, Mississippi

THE RADIOGRAPHIC demonstration of a calcified fecalith in the appendiceal area is a highly important finding in evaluating the acute abdomen. The large majority of individuals exhibiting signs and symptoms of acute abdominal disease who have this associated x-ray finding are subsequently found to have acute appendicitis.

For these reasons prompt surgical intervention is usually advocated by clinicians encountering this radiographic finding in patients with signs and symptoms of abdominal disease whether of mild or severe degree. Furthermore, most authors advise appendectomy in asymptomatic individuals on whom the finding is an incidental one as a by-product of routine x-ray examinations of one sort or another.

The origin of appendiceal stones is thought to be based on impaired peristaltic motion of fecal contents back into the cecum, there resulting an inspissated fecal mass within the lumen of the appendix. This particle exerts an irritant effect on the appendiceal wall and coupled with local bacterial action produces catarrhal inflammation and accumulation of mucus. Inorganic salts in the mucus are precipitated on the surface of the fecal particle with subsequent increase in its size. Repetition of this process produces the characteristic lamination encountered on x-ray studies.

The roentgenographic diagnosis of appendiceal fecalith is usually not difficult. The typical example is described as being a single, laminated calcification, oval in shape, right lower quadrant

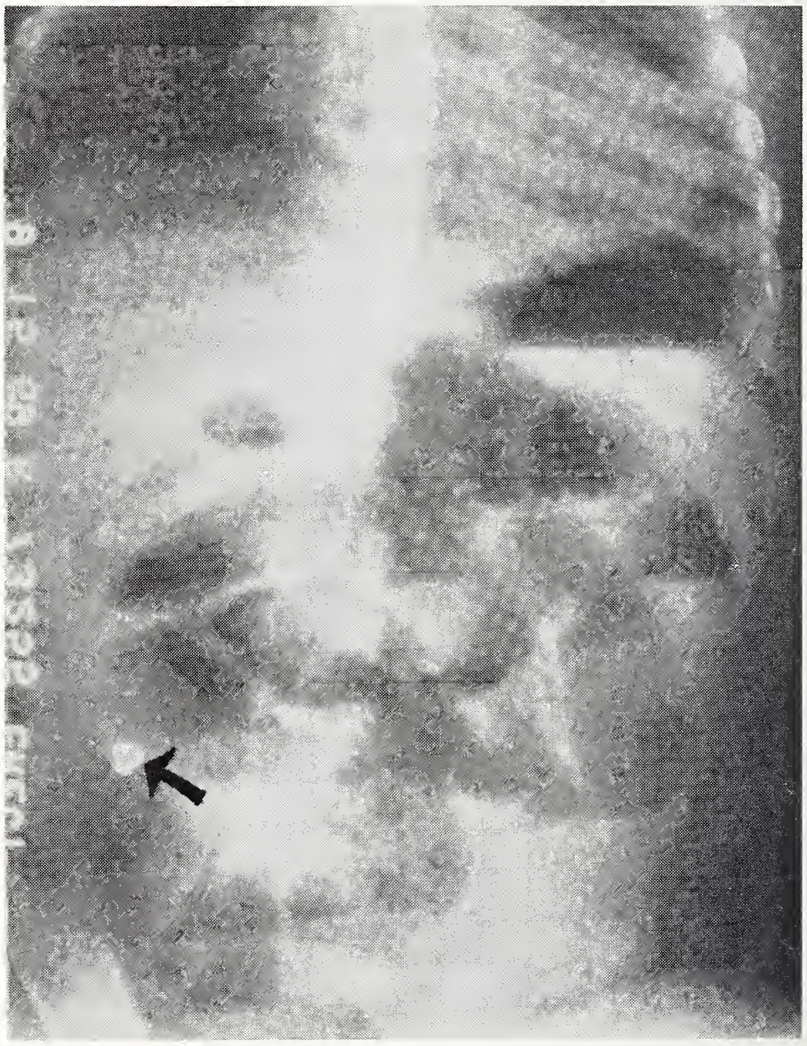

Figure 1. Erect radiograph of the abdomen (Case 1), demonstrating a rather marked ileus, with a partially obscured calcified fecalith being indicated by the arrow. The outline of the fecalith has been emphasized for illustrative purposes.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Mississippi Baptist Hospital.

Figure 2. Recumbent radiograph of the abdomen (Case 2), demonstrating a calcified appendiceal fecalith just above the right iliac crest. Again the outline has been emphasized for illustrative purposes.

in position and around 1 cm. in diameter. Variations in size, shape, number, and position are, however, of frequent occurrence. The medially placed calcification may suggest ureteral stone, and pyelographic films occasionally may become necessary to distinguish the two. Gallstones are usually differentiated by their position, number, and distribution. Calcified lymph nodes, phleboliths, and enteric-coated medications must also be considered in the differential diagnosis.

Two illustrative cases are presented, both instances occurring in young children. While this clinical situation may be found in all age groups, it is encountered more often in pediatric and young adult groups.

Case 1: A two-year-old colored male was brought in with a three-day history of abdominal pain and vomiting. At the time of admission, the child was acutely ill and lethargic. No bowel sounds were demonstrable, the abdomen being quite distended with no localized tenderness elicited. An upright film of the abdomen (Figure 1) demonstrated the presence of considerable gas accumulated primarily in the small bowel with fluid levels generally distributed through the abdomen. In the right lower quadrant, a ring-like calcific shadow could be identified (see arrow Figure 1). Surgical exploration disclosed the presence of a ruptured appendix with generalized peritonitis. A fecalith was found in the appendix near the point of perforation.

This case illustrates the presence of a perforation and peritonitis as a complication of acute obstructive appendicitis.

Case 2: A four-year-old white male had been complaining of pain around his umbilicus periodically for about two years. This was never severe or sustained. A work-up in another hospital and subsequently in the Mississippi Baptist Hospital had revealed a laminated calcification in the right lower quadrant, believed to be in the appendix (see arrow Figure 2). No other abnormalities were found.

Appendectomy revealed the presence of a fecalith in the appendix with associated low-grade chronic inflammatory changes. A follow-up four years later indicated that the patient was symptom free since his appendectomy.

In this case we see an example of an appendiceal calculus identified at a time when the patient was not acutely ill. Removal was advised because of the increased probability that an acute appendicitis would eventually occur along with the very strong possibility that perforation might be a complication. ★★★

1151 N. State St.

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Sterilization and the Law in Mississippi

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The legal status of sterilization is governed in Mississippi by the 1928 Sex Sterilization Act which provides for involuntary sterilization for the mentally ill, mentally deficient, and epileptics. The author discusses current attempts to update the 1928 law to provide for voluntary sterilization for nontherapeutic reasons. He also considers the position of the Mississippi State Medical Association on sterilization as established by the Council on Medical Service.

IN THE UNITED STATES, births outnumbered deaths by nearly three to one during the 1950's, according to census bureau reports. Bureau statistics show 40.9 million births in the United States during the decade compared with 15.6 million deaths. The difference between the two figures represents a natural population increase of 25.3 million. In addition, the number of immigrants exceeded the number of emigrants by nearly 2.7 million bringing the total 10 year population gain to 28 million. The population thus increased by 18.5 per cent, from 151.3 million in 1950 to 179.3 million in 1960. During the decade, the white population showed a natural increase of 15.5 per cent. The natural increase of the nonwhite population was 26.8 per cent.

It has been estimated that at the present birth and death rate there will be standing room only left on the earth's surface in 100 years. One obvious remedy for this "population bomb," as it has been called, is more liberal use of voluntary sterilization.

MSMA STAND

In a supplemental report made by the Council of Medical Service of the Mississippi State Medical Association in 1961, sterilization was considered to be produced by vasectomy in the male and salpingectomy or tubal ligation in the female. The four types of sterilization were defined as follows:

1. Eugenic—which is sterilization of persons deemed to be socially inadequate, such as the feeble-minded, insane, epileptic, habitual criminal, or morally degenerate. There are 29 states with statutes providing for sterilization on these grounds, 26 of which are compulsory.

2. Genetic sterilization—which is sterilization performed for genetic conditions such as Huntington's chorea, achondroplasia, hemophilia, hereditary spinal sclerosis, progressive subcortical encephalopathy, and other static, incurable, and/or transmissible diseases which, of natural course, would add to the general population the burden of defectives or become the proximate cause of death or disability of the spouse.

3. Therapeutic sterilization—which is sterilization for any disease condition, not sufficiently amenable to definitive treatment, which would be aggravated by pregnancy to the detriment of the patient. Examples of such conditions are chronic severe hypertensive cardiovascular disease, advanced nephritis, advanced cardiac disease, isoimmunization due to Rh blood factor, and certain psychiatric disorders.

4. Nontherapeutic sterilization—which is understood to exclude any purely medical indication for the procedure. Requests by patients for this procedure may originate from a variety of personal reasons.

In reviewing the council's report, the Reference Committee on Medical Practices noted that criteria for eugenic, genetic, and therapeutic sterilization are available. It recommended that in re-

Read before the Section on Obstetrics and Gynecology, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

gard to nontherapeutic sterilization, local hospital staffs set up their own criteria. The report of this reference committee was unanimously adopted.

STERILIZATION ACT

In 1928, the Mississippi legislature passed a Sex Sterilization Act which provides for involuntary sterilization for the mentally ill, mentally deficient, and epileptics. It is based upon the premise that the person to be sterilized is a probable potential parent of socially inadequate offspring which would be likewise afflicted. The law provides for 30 days' minimum notice prior to performing the procedure which notice shall be given the patient, relatives, or guardian with further provision for a hearing in the presence of the patient. This is the only stated legal basis for sterilization by written law in Mississippi at present.

PROPOSED REVISION

In the 1962 session of the Mississippi legislature, Senate Bill No. 1984 was introduced. Its general purpose was to make voluntary sterilization for nontherapeutic reasons legal. This would protect the physician from legal liability when performing sterilization procedures requested by the patient for nontherapeutic reasons and thereby allow more liberal use of this procedure especially in the indigent patient. Shortly after this bill was introduced in the Mississippi Senate, the Virginia legislature passed a similar bill legalizing voluntary sterilization thus becoming the first and only state to accomplish this feat.

Other purposes of the bill introduced in the Mississippi Senate were to establish a planned parenthood clinic under the State Board of Health, to permit voluntary sterilization and authorized sterilization on charity patients in certain instances. Section 3 of this bill dealt specifically with sterilization and is quoted as follows:

Voluntary sexual sterilization of persons is hereby authorized, and to that end a tubal ligation service to be administered through all charity hospitals, or private hospitals caring for charity patients, within the State of Mississippi is hereby established. At least one bed in every general charity hospital shall be set aside and designated for the tubal ligation service alone except when there may be no tubal ligation requests pending. The tubal ligation service, or ligation of tubes to produce sterilization hereby established, shall be rendered free of charge to those individuals unable to afford private medical care requesting this service in writing under the following circumstances:

(a) Any adult married person with two (2) or more natural children if joined in the request by the other spouse.

(b) Any minor married person with two (2) or more natural children if joined in the request by the other spouse and living parents, or parent, or guardian.

(c) Any adult woman who has been delivered of at least one (1) illegitimate child.

(d) Any minor woman who has been delivered of one (1) illegitimate child if joined by her living parents, or parent, or guardian.

(e) Any adult woman, regardless of the number of children, who has a medical condition by virtue of which a future pregnancy would endanger her life or her health.

(f) Any minor woman, regardless of the number of children, who has a medical condition by virtue of which a future pregnancy would endanger her life or her health if joined by her husband and living parents, or parent, or guardian.

(g) In the event the whereabouts of a spouse is unknown, after a diligent search and inquiry to ascertain the same, the single signature of the spouse requesting the sterilization will suffice if accompanied by an affidavit stating that a diligent search and inquiry for the other spouse has been made and the whereabouts be unknown.

In the event there be no living parents, or the whereabouts of the living parents, or parent, or guardian of the person requesting the sexual sterilization be unknown, and they be necessary parties, the person requesting same shall be joined by two (2) relatives within the third degree of kinship as computed by civil law.

This bill passed the Mississippi Senate by a large majority, however, it was still in committee in the House of Representatives when the legislative session ended and, of course, did not become law.

PHYSICIAN'S ROLE

It is admittedly difficult for any person or group of persons to say at what point voluntary nontherapeutic sterilization should begin and end. However, we as obstetricians and gynecologists are in a position to be more familiar with this aspect of life than others, and we have the responsibility of trying to help provide a satisfactory solution to the massive population explosion. One remedy is at hand, namely voluntary sterilization, and it is up to us to see that it is used wisely.

It is ironical that the population group which most needs this service and in general desires it, the indigent patient, is in the least favorable position for obtaining it. Therefore, it falls the re-

sponsibility of the agency which handles the large health problem of these indigent patients to provide a means whereby voluntary sterilization can be obtained at State expense. This would help to end the vicious circle of unwanted children into welfare supported families who cannot afford to stop having children because they are too poor to obtain the remedy.

This is a problem that the overcrowded countries of the world, such as India and China, are now having to face in a much further advanced stage than the United States. It is hoped we will be farsighted enough to treat this disease of humanity in its early stage as we so diligently try to do with diseases of the individual. ★★★

2216 Fourteenth St.

LAB LANGUAGE

A Canadian engineer turned philologist has come up with a glossary of new and useful—with tongue in cheek—words intended especially for those engaged in research:

Bessgess —any result of a reliability test.
Nogodob —never got off the drawing board.
Pudat —piles of useless data.
Pap —program analysis procedure.
Wytwash —evaluation tests on the researcher's pet project.

—*Insider's Newsletter*

Contraception and the Law In Connecticut

CHARLES L. BUXTON, M.D.
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Despite numerous repeal attempts, Connecticut remains the only state to forbid by law the use of drugs or instruments to prevent conception. The law, first passed in 1879, has been attacked in each legislative session for the past 48 years. Such attacks have been blocked successfully by the state's Roman Catholics, a strong political power by virtue of their very numbers. The author, who is chairman of the department of obstetrics and gynecology at Yale University Medical School, discusses current efforts to have the law declared unconstitutional under the Fourteenth Amendment.

In 1879, the Protestant Puritan legislature of the State of Connecticut passed a law which would be laughable if it did not have such tragic consequences. This law, stimulated by Anthony Comstock's federal obscenity law, interdicted the use of drugs or instruments to prevent conception. Furthermore, these Puritan gentlemen also made it a criminal offense to be an accessory in assisting or counseling anyone to use such drugs or instruments.

Within the past 48 years, there have been 24 attempts in the State Legislature, which meets every two years, to repeal this law. However, the Roman Catholic population of Connecticut has increased enough to make it a political power, and every year a small but articulate and well-organized group of Roman Catholic extremists successfully persuade session after session to leave the law as it is.

Just how anybody is expected to enforce this law is something which nobody seems to have seriously considered. Police power, as a third party on the connubial couch, is a subject the farcical implications of which have all kinds of possibilities. Furthermore, there are few, if any, proponents of the law zealous enough to suggest the invasion of the physician's private office in the hope of interrupting a consultation at which the physician is giving his patient contraceptive advice. Furthermore, since nothing is mentioned in this law concerning the *sale* of contraceptive devices, these are displayed with impunity on the drug store counter.

But there is a bitter and tragic aspect to this situation which makes it economically discriminatory in a vicious way. The invasion of the private physician's office may not be taken seriously by the minions of the law, but the fact that the law exists unquestionably prevents institutions within the public domain, such as hospitals, welfare agencies, and other organizations, from maintaining contraceptive clinics for the dissemination of contraceptive advice and equipment to the lower socioeconomic groups who cannot afford a private physician's fee. These, of course, are frequently the people who most need this kind of help.

The absurd characteristics of the law were pointed out to me when I moved to Connecticut in 1954 to become chairman of the department of obstetrics and gynecology in the Yale University School of Medicine, the only medical school in Connecticut. However, it really was not until 1958 that the tragic implications of this law were startlingly revealed to me. In fairly quick succession, several of our obstetrical patients suffering from severe medical complications of pregnancy

From the Department of Obstetrics and Gynecology, Yale University School of Medicine.
Read before the Section on Obstetrics and Gynecology, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

either died or suffered vascular accidents which were permanently incapacitating. These patients should never have become pregnant in the first place, but they had not been able to obtain contraceptive advice.

One particularly tragic case was that of a young girl of 19 whose severe mitral stenosis would have been amenable to cardiac surgery had she not become pregnant. With the help of surgery, she might have been able to have several children. Thus, this law was largely responsible for the death of two individuals, the mother and the unborn baby.

Another patient with Cushing's disease partially cured by pituitary irradiation was admitted in the 22nd week of pregnancy with a blood pressure of 300+/170. Without going into too many medical details, it is sufficient to say that she had a cerebral vascular accident shortly after admission. She hovered between life and death in an oxygen tent for a number of weeks during which time it was necessary for her to have a tracheotomy and to be continuously treated on a titration of hypotensive drugs. She aborted a stillborn fetus as a result of her cerebral accident and was left with a partial right paresis and a very distressing emotional instability. This combination of residual effects has left her completely incapacitated physically, intellectually, and emotionally. One presumably minor item, the costs of her hospital stay, during which no professional fees were charged, amounted to $3,319, and 230 days of rehabilitation in a convalescent home cost $5,175. Her husband was unemployed.

TEST OF CONSTITUTIONALITY

It seemed incredible from every point of view that such a state of affairs should be allowed to continue in what was generally considered to be a civilized country. Consultation with Professor Fowler Harper of the Yale Law School resulted in a decision to challenge the constitutionality of this Connecticut law in that it violated the Fourteenth Amendment of the United States Constitution which assures all citizens the basic civil and human rights of personal liberty. The case was heard in the lower courts of Connecticut in June 1958, with the state's attorney as the defendant. The Court found no unconstitutionality in the state law. The lower court's decision was upheld in January 1959 by the State Supreme Court and, upon appeal, was heard in the United States Supreme Court in March 1961.

On June 19, 1961, the United States Supreme Court made public its decision that it had refused to consider the constitutionality of the Connecticut law because the law was in fact a "dead issue" and was not enforced.

Since this was considered to be the case, the Planned Parenthood League of Connecticut opened a contraceptive clinic on Nov. 3, 1961. It was promptly closed on Nov. 11, 1961, upon the order of the District Attorney, who stated that the clinic was acting in violation of Connecticut statutes. The leading participants in the clinic, the medical director and the executive director, were arrested and later released on $250 bail apiece. Evidence concerning the activity of the clinic was obtained by members of the district attorney's detective staff, and a trial was held on Jan. 3, 1962. The culprits were found guilty, fined $100, and again released on bail when an appeal was made to the State Circuit Court of Appeals.

It took just nine months for the Circuit Court judge to file his opinion with the Appellate Court. Upon reviewing the findings the higher court concurred with the conviction and passed the case along to the State Supreme Court of Errors.

A couple of comments in the Appellate Court judgment might be of interest.

> Much of the defendants' brief . . . is directed toward an attack on the constitutionality of this statute because of its invasion of the freedom of conjugal felicity which married couples by the natural order of society are entitled to enjoy. It is stated that an enforcement of this statute would result in an invasion of privacy, a violation of the sanctities of the home and a gross intrusion in the most sacred area of life. . . . There is no suggestion in the record or in the others that these rights have been invaded.

I can't help but wonder whether the three good and worthy judges who constitute the Appellate Court ever practiced contraception!

Another comment in the judgment is well worth quoting.

> It is not alone for the preservation of morality in the religious sense that the legislature may have been impelled to act but also for the perpetuation of the race and to avert those perils of extinction of which states and nations have been alertly aware since the beginning of recorded history. Each civilized society has a primordial right to its continued existence and to the discouragement of practices that tend to negate its survival.

I would like to make the disrespectful suggestion that these worthy gentlemen wake up to the facts of life. The case is now in the hands of the

Connecticut Supreme Court of Errors and, hopefully, the clanking machinery of the law will some day relieve the State of Connecticut from the shackles of the Middle Ages.

JUSTIFICATION FOR DEATH?

Before leaving this subject, one other aspect of it must be briefly discussed. It may properly be introduced by reading you excerpts from a letter I received in December 1960: "I am deeply interested in your test case challenging the constitutionality of the birth control law in Connecticut. You see, I have a very personal interest in birth control, because for lack of it, in one way or another, I lost a wonderful wife and mother of six children. She was only 31 years old when she died, eight hours after our child was born.

"This was her sixth Caesarian section. Complications at birth were a rupture of the lower uterine segment, placenta previa, and irreversible shock. I have gone to the County Medical Association, the doctor who delivered my six children, the priest who anointed her, and the Mother Superior and Administrator of the Hospital to find out why such a tragedy happened in this day and age of medicine. I can find no justification for her death. We had asked for and received assurances that the doctor would intervene after the fourth section, but I was told that nothing could be done because my wife had run into trouble. At the time of the fifth Caesarian we felt positive that a hysterectomy would be done, but I was told that since everything had gone so well that there was no need to remove the uterus. Last March that long-promised and long-awaited hysterectomy was performed but only as a last ditch measure. She received 23 pints of blood, 1 unit of plasma, and 5 units of fibrinogen but went into irreversible shock and died.

"Regardless of whether the hospital is Catholic or not it is still a hospital, and its first duty is the preservation of life. I have heard the sentiments of a few doctors on my wife's case and the usual remark was, 'Well, it was a Catholic hospital, what did the husband and wife expect would be done?' Has medicine reached the sorry state where a doctor's oath to preserve life must be outweighed by misdirected convictions of what religious ethics are involved.

"In closing I want to point out that the only method allowed Catholic parents is the rhythm system, or abstinence. Because of my wife's menstrual cycle, which was thoroughly unpredictable, we had to either abstain or face the wrath of the church. Abstinence in our marriage was out of the question. Contraceptives are forbidden because of our religion. What do people who find themselves in our predicament do? Men and women living together in the bonds of matrimony are also living in a life of sin because they use means to prevent further childbirth. Is the health of your wife and children to be disregarded? The Department of Welfare and all the other agencies of assistance could almost be abolished if a more realistic view were taken of this whole program. This is one of the most serious questions in the world today. It is time the Church and State sat down and discussed it openly."

It is easy to read between the lines of this letter and appreciate the anguish from which this man was and is suffering. But I do not need to be a Catholic to know that sanction could easily have been obtained for the removal of this uterus at the third or fourth Caesarian section because it was indeed a defective organ, having a thinned-out scarred lower uterine segment rendering it dangerous to this woman's health. We are well aware of the Catholic doctrine to the effect that if an operation carried out for the preservation of the life and health of a woman happens to secondarily sterilize her, that the operation is therefore permissible.

A MEDICAL MOTIVATION

I have had many other letters which have enthusiastically supported my part in this Connecticut controversy as though I were attempting to carry on a little private war against the Catholic Church. Aside from having no pretentions toward being a 20th Century Don Quixote, I would like to repeat the statement which I have made in public numerous times before to the effect that this is definitely not so. Admittedly, in Connecticut, a small group of zealous Catholics has repeatedly prevented repeal of this law, but it must be remembered that the law was originally passed by a legislature which was overwhelmingly Protestant. Furthermore, there is a persuasive and authoritative voice in the Catholic Church which fully recognizes the socioeconomic, psychological, and moral aspects in the importance of family planning. As long ago as 1951, Pope Pious XII stated in his address to the National Congress of the Family Front, "We affirm the legitimacy and at the same time the limits—in truth very wide—of a regulation of offspring which, unlike so-called 'birth control,' is compatible with the law of God. One may even hope that science will succeed in

providing this licit method with a sufficiently secure basis."

My motivation for becoming entangled with the law in Connecticut was purely a medical one. As the chairman of the department of obstetrics and gynecology in the only medical school in Connecticut, I felt it my responsibility to do everything possible to maintain and improve the physical and psychological welfare of individuals who came within the jurisdiction of my specialty. This original motivation has indeed received some devious interpretations. One of my favorite communications came on a plain manila post card from some indignant character somewhere in the Midwest. It said, "Dear Doc: If your mother had been practicing what you are preaching, you never would have been born—and that would have been a good thing too!" ★★★

333 Cedar St.

SIMPLICITY PSYCHOSIS

The dial-anybody-everywhere telephone systems have popped up all over the world, and as in the United States, some confusion has inevitably resulted from the long numbers. The Royal Post Office, which runs Britain's state owned telephone system, has retained a consulting psychiatrist to advise how to help people remember their new 10 digit numbers.

—*Insider's Newsletter*

Maternal Mortality in Mississippi During 1960

MICHAEL NEWTON, M.D.
Jackson, Mississippi

As a part of its ongoing study of maternal deaths in Mississippi, MSMA's Committee on Maternal and Child Care presents its fourth annual report which covers findings for 1960. The committee has reviewed 58 maternal deaths occurring in 1960 in terms of adequacy of replies, cause of death, and avoidable factors. In comparing these data with the 1959 findings, a slight rise in the number of maternal deaths is noted. However there is a slight decrease in the proportion of avoidable deaths. Hemorrhage continues to be the predominant cause of direct obstetric death.

THE FOLLOWING IS the fourth annual report of studies on maternal deaths in Mississippi, conducted by the Committee on Maternal and Child Care of the Council on Medical Service of the Mississippi State Medical Association. Previous reports have covered the years 1957, 1958, and 1959. Findings for 1960 are here presented. Methods of data collection differed only slightly from those used in previous years. Thus, in some of the later 1960 cases the information returned on the initial data sheet was supplemented by replies to specific questions which were asked of the responding physician by the committee in order to clarify uncertain points. In presenting these data, information for 1960 is compared directly with that for 1959.

Chairman, Committee on Maternal and Child Care, Council on Medical Service, Mississippi State Medical Association.

A slight rise in the number of maternal deaths is noted (Table I). The percentage of replies received and of usable replies remains at the same high level. A gratifying improvement in the quality of the replies was observed. More were considered to be in Category 1 (complete data sheet, relevant explanatory note, and autopsy report) than in any previous year (Table II), and the mean adequacy was also at the highest level—2.63. There were, however, still a number of replies which were so sketchy as to give little useful information on the cause of death, its avoidability, or the possible avoidable factors.

TABLE I
STUDY MATERIAL

	1959		*1960*	
	NO.	PER CENT	NO.	PER CENT
Total Cases	52	...	58	...
Replies Received	46	88.5	51	87.9
Replies Usable	43	82.7	49	84.5

TABLE II
ADEQUACY OF DATA

	1959		*1960*	
Category	NO.	PER CENT	NO.	PER CENT
5	0	...	7	14.3
4	7	16.3	8	16.3
3	10	23.2	8	16.3
2	14	32.6	12	24.5
1	12	27.9	14	28.6

The number of direct obstetric deaths (those resulting from the complications of pregnancy it-

self) has again shown a slight decline (Table III). During 1960 there were four deaths for which the committee could assign no definite cause because of lack of information. When the causes of the

TABLE III

CAUSES OF DEATH

	1959		1960	
	NO.	PER CENT	NO.	PER CENT
Direct Obstetric	35	81.4	35	71.4
Indirect Obstetric	6	14.0	10	20.4
Undetermined	2	4.6	4	8.2

direct obstetric deaths are analyzed (Table IV), hemorrhage is still found to predominate. However, it accounts for only 29 per cent of the total deaths studied as compared with 44 per cent in

TABLE IV

CAUSES OF DIRECT OBSTETRIC DEATHS

	1959		1960	
Cause	NO.	PER CENT OF TOTAL DEATHS STUDIED	NO.	PER CENT OF TOTAL DEATHS STUDIED
Hemorrhage	19	44.2	14	28.6
Toxemia	11	25.6	9	18.4
Infection	2	4.7	6	12.2
Vascular Accidents	1	2.3	2	4.1
Anesthesia	2	4.7	2	4.1
Other	..	...	2	4.1

1959. A slight increase in the deaths due to infection is observed, up to the total number (six) observed in 1957.

A slight decrease in the proportion of avoidable deaths was noted in 1960 (Table V). Analysis

TABLE V

AVOIDABILITY

	1959		1960	
	NO.	PER CENT	NO.	PER CENT
Avoidable	38	88.4	36	73.5
Unavoidable	4	9.3	8	16.3
Undetermined	1	2.3	5	10.2

of the avoidable factors indicated that physician factors were considered to be involved in 23 instances, patient factors in 23, and hospital factors in 4. In 14 cases two avoidable factors were thought to be present. It was of interest that failure to seek adequate care during pregnancy was implicated in 19 out of 23 cases in which patient factors were thought to be responsible. The quality of care given during pregnancy accounted for 4 out of 23 cases in which professional factors were concerned.

COMMENT

No marked changes in the relative proportions of the causes of maternal deaths were noted in 1960. The slight decrease in the number of women dying from hemorrhage and from toxemia is encouraging, since these are in most instances truly preventable diseases. During the three previous years one, three, and two deaths respectively were attributed to the effects of anesthesia. In 1960 two such deaths occurred. In both instances spinal anesthesia was involved, and in both the death was totally unexpected and occurred in a relatively normal woman. These deaths re-emphasize the potential danger of spinal anesthesia unless adequate personnel are available to watch the patient and proper resuscitative measures are ready. When it is not possible to provide these, other types of anesthesia may be preferable for vaginal deliveries, such as self-administered Trilene and paracervical or pudendal block, while abdominal delivery should only be performed where adequate facilities are present.

SUMMARY

1. Fifty-eight maternal deaths occurring in Mississippi during the year 1960 have been studied by the Committee on Maternal and Child Care of the Council on Medical Service of the Mississippi State Medical Association.

2. The results are presented in terms of adequacy of replies, cause of death, and avoidable factors according to the AMA "Guide for Maternal Death Studies."

3. The findings for 1960 are compared with those for 1959. A decrease is noted in the number of deaths from hemorrhage and toxemia, but there is an increase in deaths from infection. ★★★

2500 North State St.

WHODUNIT

Los Angeles police are trying to outwit crooks who cover their fingertips with antiseptic spray-on bandages to avoid leaving prints.

Clinicopathological Conference XLIX

Conducted by the Department of Pathology
Mercy Hospital—Street Clinic
Vicksburg, Mississippi

In CPC XLIX Dr. A. P. Messina discusses the case of a 63-year-old white female admitted for severe dyspnea, orthopnea, and cough with expectoration of bloody sputum. The patient expired eight hours after admission. The onset of her illness occurred in 1956 with pain and swelling of both hands. Subsequently, the skin of the hands became tightened and blanched with the fingers drawn in a position of flexion. Within several months, the skin of the lower legs, feet, and toes showed the same alterations. Later symptoms included weakness, epigastric pain, and nausea. Dr. R. H. Fenstermacher gives the pathologic findings.

This 63-year-old white female was admitted to Mercy Hospital from the emergency room where she had been seen for severe dyspnea, orthopnea, and cough with expectoration of bloody sputum. These present complaints had developed over the prior three or four days and had become increasingly severe so that sleep was impossible and the patient was able to breathe only in an upright or sitting position.

This patient was first seen by the admitting physician in May 1956, with chief complaints of pain, burning, and swelling of both hands for about one month and occurring shortly after shearing sheep. The first symptoms were described as swelling and tingling and were not relieved by home medications or treatment. Hospitalization was advised but patient would not consent, so office treatment was attempted. Examination at that time revealed a brawny edema and warmness of wrists, hands and fingers. Radial arterial pulsations at the wrists were normal and there were no changes in the nail beds. A tentative diagnosis of Reynaud's disease was made, but the usual therapy for this condition was not effective.

After approximately one month the skin of the hands became tightened and blanched with the fingers drawn in a position of flexion. Joint changes of rheumatoid arthritis were not present. Within several months the skin of the lower legs, feet, and toes showed the same alterations described in the upper extremities. Cortisone therapy was instituted and there was symptomatic improvement despite the fact that the skin induration and flexion deformities of the phalanges became more pronounced. Repeated suggestions of hospitalization were vetoed by the patient and on several occasions prescribed medication was discontinued and home remedies and patent medicines were taken.

The patient was seen periodically at home and in the office and two months before admission started complaining of weakness, epigastric pain, and nausea. Hemoglobin determination showed a reduction to 23 per cent. No other laboratory studies could be done. There was progressive increase in severity of the digestive complaints and then the sudden onset of dyspnea and orthopnea and then the cough with blood-streaked sputum. At that time the patient consented to go to the hospital and the necessary arrangements were made. She persuaded her husband to stop at a department store on the way to the hospital to purchase gowns. When he returned to the car she insisted that he drive her home rather than to the hospital. The same afternoon she was rushed to the emergency room about 4:00 p.m. in apparent extremis.

Pertinent facts in a review of the past history revealed a bilateral oophorectomy at age 17. The ovaries were said to be cancerous, but this fact could not be substantiated. The patient also had had angioneurotic edema and hives for many years, but there was no known cause for this al-

lergy. In 1942 there was a herniotomy for strangulated inguinal hernia and in 1953 thrombophlebitis in the right leg following an injury. The patient had been married 40 years and had had no pregnancies. Family history was irrelevant.

Physical examination revealed an extremely ill and practically moribund female with temperature of 99°, pulse 130, and blood pressure 200/100. There was extreme respiratory difficulty with frequent expectoration of red-pink and red-brown sputum. There was typical moon-face appearance and some edema of the face. The skin over the upper and lower extremities appeared thickened and indurated and the fingers and toes were flexed. There was also a moderate generalized edema. Numerous moist rales were heard over both lung fields. The heart was enlarged and the rate rapid with a definite gallop rhythm. The remainder of the physical exam was non-contributory. Blood study showed red blood cells 3 million, hemoglobin 5.4 gm., white blood cells 27,500 with 84 polymorphonuclears and 16 lymphocytes. There was no urinary output so urinalysis could not be done. No x-ray studies were performed.

The patient was sedated and one unit of A Rh positive compatible blood was administered. Cedilanid and Thiomerin therapy were instituted and an indwelling catheter placed in the urinary bladder. Dyspnea and cough increased with expectoration of blood and also some questionable hemoptysis. The patient expired at 11:40 p.m., seven hours and forty minutes after admission to the hospital.

DISCUSSION

Dr. A. P. Messina: "We don't know very much about this patient because of the lack of cooperation between the patient and her attending physician and her consistent refusal to be hospitalized for proper study until the terminal stage of her illness. The onset of her present illness apparently occurred in 1956 with the pain and swelling of the hands. There was no evidence of rheumatoid arthritis, and this illness was considered and treated as a dermatomyositis or scleroderma. At this time there was moderate blood pressure elevation. Reynaud's vasospastic phenomenon was considered, but vasodilators and local therapy gave no symptomatic relief. Stellate nerve ganglion block was suggested but refused by the patient. The slight temporary symptomatic improvement on cortisone therapy seemed to indicate a collagen type disease process. The progression of this process with the increasing elevation of blood pressure could be an indication of systemic scleroderma with renal and other visceral involvement. Terminally there was congestive heart failure possibly due to severe anemia of undetermined etiology. One of the collagenoses, probably scleroderma of the progressive generalized type, is also present and should be differentiated from dermatomyositis. The late gastrointestinal symptoms may be the result of esophageal, stomach or small bowel fibrosis, and sclerosis as a part of this progressive systemic sclerosis of scleroderma."

PATHOLOGIC FINDINGS

Dr. R. H. Fenstermacher: "The postmortem findings in this case were moderately complex and possibly open to different interpretations. There was brownish pigmentation of the skin over the upper chest, hands and forearms, and brawny induration and hardening of the skin of arms, forearms, hands, and chest wall. Lower legs, ankles, and feet were moderately edematous and the skin indurated. Each pleural cavity contained 600 cc. of yellow-pink fluid. The lungs showed marked congestion and edema with patchy consolidations in right and left lower lobes and right middle lobe. The upper lobes appeared somewhat indurated with marginal areas of bulbous emphysema. Bronchi contained blood-streaked and frothy exudate.

"The heart weighed 510 gm. and showed diffuse hypertrophy and right cardiac dilatation. Coronary atherosclerosis was moderately severe and small areas of fibrosis were noted in the myocardium of the left ventricle and interventricular septum. The spleen was slightly enlarged, weighing 260 gm. The liver weighed 1520 gm. and was grossly nor-

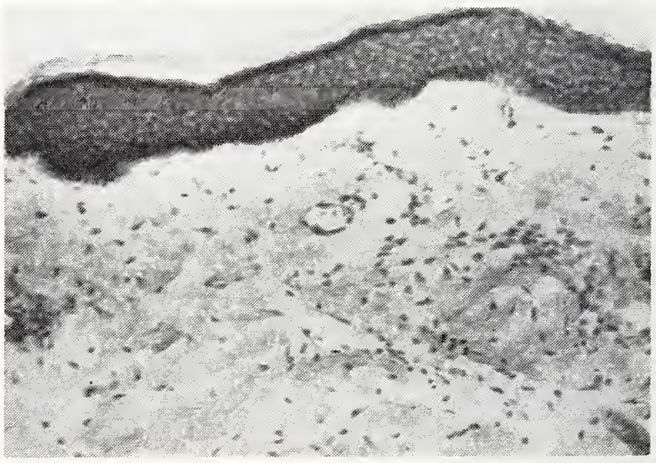


Figure 1. Section of skin of thorax showing epidermal atrophy with slight hyperkeratosis and thickened, disrupted collagen. × 100

mal. Portal and hepatic vessels contained no thrombi. The kidneys were smaller than normal with nodular and pitted cortical surfaces. Renal cortex was decreased in thickness. A 2.5 cm. cortical adenoma was found in the right adrenal gland.

"The esophagus was moderately dilated and thick walled and showed small superficial ulcers and dilated veins in the distal esophagus. The stomach was also dilated and contained numerous small hemorrhagic mucosal erosions. The small and large bowel were not remarkable except for multiple colonic diverticula. The brain was not examined.

"Sections of skin showed thickening and condensation of fibrous tissue in the dermis and atrophy of the epidermis. There was minimal perivascular lymphocytic infiltration and dermal appendages were scant and atrophic. Sections of the heart showed myocardial fibrosis, generally of the focal type. There was interstitial fibrosis of the lungs with thickening of the vascular walls and hemosiderin laden macrophages in the alveolar spaces. Patchy but prominent leukocytic infiltration was seen in addition to the fibrosis in the right middle and lower lobes and left lower lobe. Renal

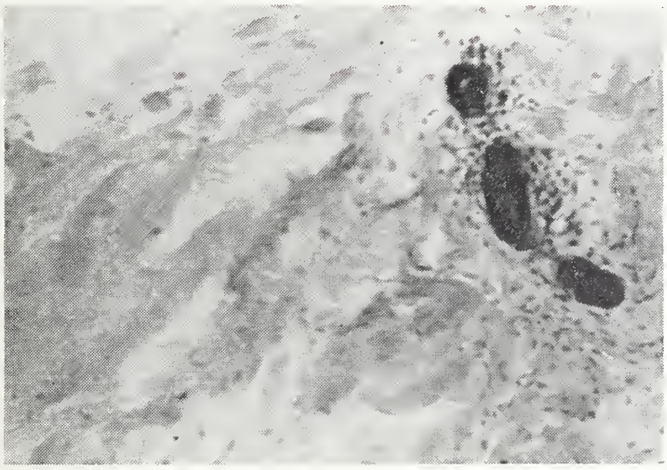


Figure 2. Skin with thickened, edematous collagen, atrophic dermal appendages, and slight lymphocytic infiltration. × 100

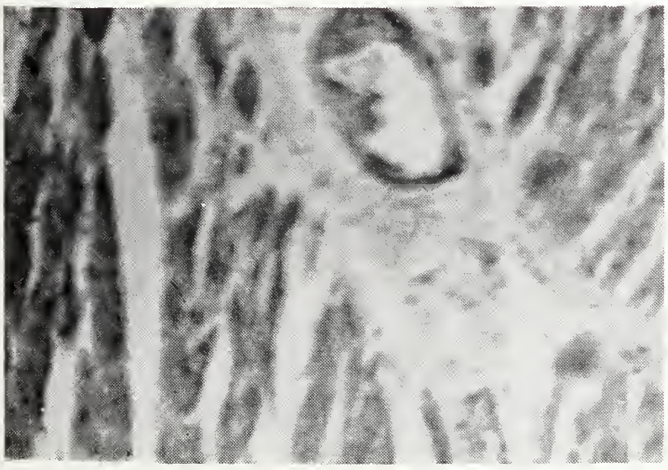


Figure 3. Cardiac muscle showing thickened arteriole and area of fibrosis. × 250

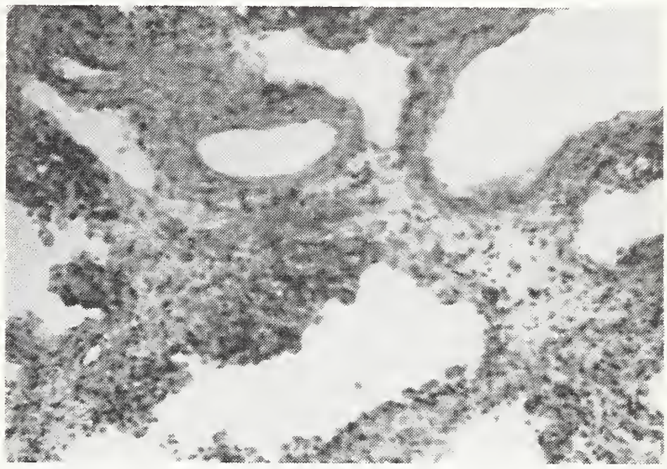


Figure 4. Lung with interstitial fibrosis, thickened arterioles and leukocytic infiltration. × 100

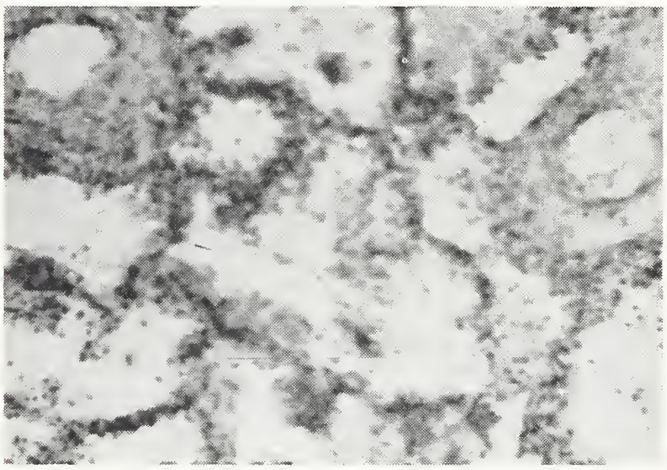


Figure 5. Lung with macrophages and leukocytes in alveolar spaces and thickened arterioles. × 100

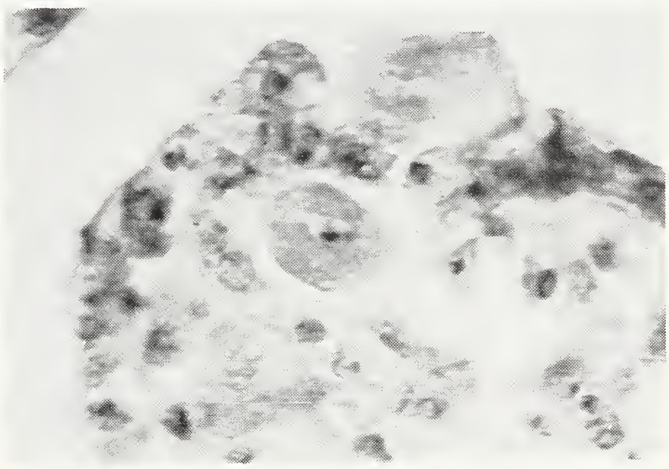


Figure 6. Kidney glomerulus showing capillary fibrinoid necrosis. × 475

morphological changes were pronounced and included thickening of the glomerular basement membrane and fibrinoid necrosis in the arteriolar and capillary walls. Interlobular arteries showed

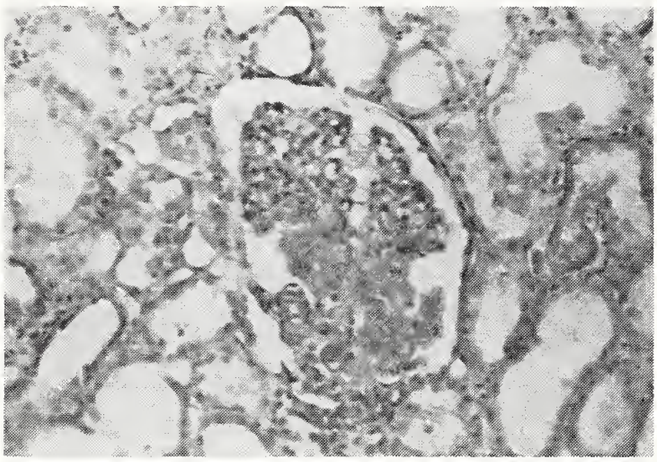


Figure 7. Kidney glomerulus showing partial fibrinoid necrosis and partial normal glomerular capillary. × 100

varying degrees of degeneration and fibrinoid necrosis and tubules were hypertrophic. Histologically, renal changes did not suggest any type of

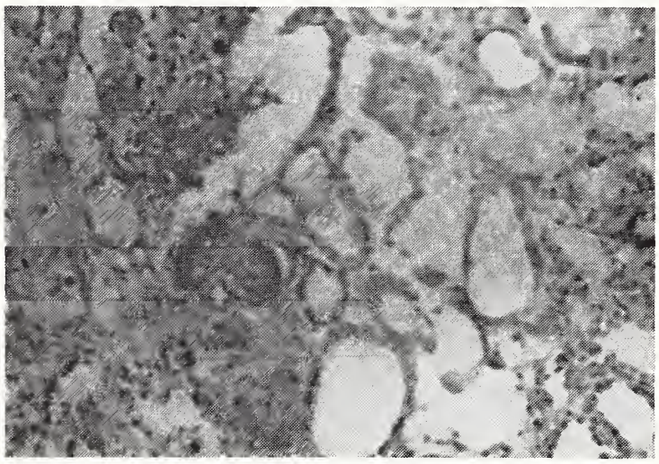


Figure 8. Kidney with degeneration in interlobular arteries and glomerulus. × 100

glomerulonephritis. Sections of esophagus showed muscle atrophy with fibrosis and edema. There was mucosal ulceration and dilated submucosal vessels. The stomach contained small hemorrhagic ulcers. Some blood vessels in the walls of the gastrointestinal tract had undergone chronic sclerotic narrowing.

Figure 9. Section beneath serosa of small bowel showing thickening and sclerotic narrowing of artery. × 100

"The final anatomic diagnoses were generalized scleroderma with involvement of skin of thorax and upper and lower extremities; hypertrophy of heart and focal myocardial fibrosis; bronchopneumonia, bilateral, and diffuse pulmonary interstitial fibrosis; subendothelial fibrosis and fibrinoid necrosis of glomerular capillaries and small renal arteries; fibrosis and ulceration of esophagus and multiple small gastric hemorrhagic ulcerations; chronic passive congestion of spleen and liver; cortical adenoma of right adrenal gland; diverticulosis of colon; pleural effusion, bilateral. The salient pathological change is the rather diffuse and progressive collagen alteration and abnormality, apparently arising in the skin and extending to viscera. It has been stated that no organ can be considered exempt inasmuch as fascial sheaths swirl everywhere in the body." ★★★

The Street Clinic

SWEET SLEEP

A Connecticut housewife sets out bowls of tranquilizer-spiked milk for pesky skunks and later shovels them safely back to the woods.

Book Reviews

Synopsis of Pediatrics. By James G. Hughes, M.D., Professor of Pediatrics and Chairman of the Department of Pediatrics, University of Tennessee College of Medicine, Memphis, Tenn. 1031 pages with illustrations. St. Louis: The C. V. Mosby Company, 1963. $9.85.

"To make accurate information more available" is the purpose of this new condensed reference book of pediatrics by Dr. James Hughes and his staff at the University of Tennessee.

A condensation of such a broad subject as pediatrics must necessarily either sacrifice brevity and become too lengthy and detailed or omit some information. Dr. Hughes has been successful in the compromise so that his book has remained small, but retains considerable information on a wide variety of topics.

The book consists of 25 chapters and an appendix. Among the topics discussed are growth and development, psychological aspects of children, immunization procedures, childhood accidents, as well as the diseases related to the major systems of the body. The only noted omission was that of parasitology.

Space will not allow a review of all chapters of the book. An example, however, would be the chapter concerning mental retardation. In only nine pages are discussed the scope and extent of the problem, an etiological classification, a behavioral classification, management of the child, and management or counselling of the parents.

A new method of medical illustration is presented in the book. It concisely shows the organs attacked by a specific disease with arrows and labels indicating the condition created. These overlays are superimposed on the picture of a child. While these illustrations are few, they are quite good.

The appendix will serve as a useful reference to anyone dealing with children. It contains a table of normal laboratory values and the clinical use of a bacteriological laboratory. In addition is a table of pediatric drug dosage given by generic and brand names.

This book will be of value to the busy practitioner who is forced to read hurriedly. Because of its size, it is adaptable as a desk reference book. It also will be beneficial to the student or intern as he is introduced to the subject of pediatrics. The information presented is precise, current, and adequate to the management of most pediatric problems.

CARL P. BERNET, M.D.

Surgery in World War II: Thoracic Surgery, Volume I. Prepared by the Medical Department, U. S. Army with Colonel John Boyd Coates, Jr., M.C., editor in chief, and Frank B. Berry, M.D., editor for thoracic surgery. Washington: Office of the Surgeon General, Department of the Army, 1963. $7.75.

This is a history of thoracic surgery in World War II written by seven thoracic surgeons and an anesthesiologist, all of whom had vast experience in military surgery during the war. Some served in the Mediterranean and European theaters and the Zone of the Interior. A background history of thoracic surgery is given as practiced in previous wars. The difficulties and mistakes during the early phases of the war are enumerated. The prevention of pleural infection was the chief aim of the thoracic surgeon in World War I, but the thoracic surgeon in World War II soon learned that the chief objective was the restoration of normal cardiopulmonary physiology. Early during the war it became evident that plasma was not a satisfactory substitute for whole blood in the treatment of shock due to blood loss.

The development of the concept of performing selected cases of thoracic surgery as far forward as the division clearing stations in field hospitals by auxiliary surgical teams is given. The designation of certain hospitals as thoracic surgical centers is described. The management of thoracic casualties in the forward areas and at various medical installations in the line of evacuation is given in considerable detail. This book is well illustrated by drawings and actual photographs. Very little information is given about thoracic surgery in the Asiatic-Pacific theater. This will be discussed in another volume.

This is a valuable book as a historical account of thoracic surgery as practiced during World War II and as a record of the gradual evolution of our

present concepts in the management of the thoracic casualty. It is of special value to the military surgeon and to the thoracic surgeon who is interested in trauma.

RUSH E. NETTERVILLE, M.D.

Synopsis of Genitourinary Disease. Seventh edition. By Austin I. Dodson, Jr., M.D., Associate Clinical Professor of Urology, Medical College of Virginia, Richmond, Va., and J. Edward Hill, M.D., Assistant Clinical Professor of Urology, Medical College of Virginia, Richmond, Va. 384 pages with 123 illustrations. St. Louis: The C. V. Mosby Company, 1963. $7.75.

In this seventh edition of the *Synopsis of Genitourinary Disease,* the authors' aim is to bring up to date the continuing advances to the field of urology particularly those concerning diagnostic methods and specific therapeutic agents. The book is prepared as a handy reference for physicians in practice to outline the recognized principles of the practice of urology.

The first chapter on urologic diagnosis is a competent review of history taking and the evaluation of physical findings and laboratory examinations of the prostatic fluid and urine. In the chapter on instruments, procedures and internal medication, those instruments needed in general practice and their uses are described. Aside from the chapter on anatomy of genitourinary organs, the chapters are arranged mainly according to the etiology of the disease.

Although this book has been revised, it does not in many areas fully reflect modern urology to the audience it proposes to reach. The use of the oil of sandalwood for the relief of bladder irritation, the use of guiacol and glycerine as a counterirritant in chronic epididymitis, the proposed instrumental provocative tests for the determination of the cure of gonorrhea, are measures no longer in general use. Similarly, in discussing circumcision, the author suggests that babies may be circumcised without anesthesia up to six to eight months of age whereas six to eight weeks is more generally accepted.

Synopsis of Genitourinary Disease is a fundamentally sound general review of urology that will serve as a basic outline. I feel that many of the measures have not been expanded nor has the treatment been fully brought up to date.

GERALD WESSLER, M.D.

Clinical Examinations in Neurology. Second edition. By Members of the Sections of Neurology and Section of Physiology, Mayo Clinic and Mayo Foundation for Medical Education and Research, Graduate School, University of Minnesota, Rochester, Minn. 396 pages with illustrations. Philadelphia: W. B. Saunders Company, 1963. $8.50.

This book written by the neurologic group at the Mayo Clinic is undoubtedly the best book for the money on the examination of the nervous system. As was the first edition it is based on years of practical experience with the neurologic examination by the 15 authors at the Mayo Clinic. The second edition represents some enlargement by the addition of a chapter on the x-ray examination of the nervous system and information on the neurologic examination of infants.

The book combines practical advice on a step by step examination of the nervous system with information on the meaning of abnormalities found and presents helpful hints in interpretation of the abnormalities as far as localization is concerned. In addition to the practical aspects of the book there is included sufficient detail on muscle innervation, sensory innervation, aphasia testing, and various other more sophisticated techniques of neurologic examinations to satisfy the neurologist, the neurology resident, or the medical student.

The section on electromyography is probably the most clear and concise account of this technique in print today and is written by an outstanding figure in American electromyography, Dr. Lambert.

This book appears to be superior to all practical texts on the neurologic examination and should be on the shelf of every physician and student interested in the nervous system.

ROBERT D. CURRIER, M.D.

W. B. Saunders Announces Recent Publications

W. B. Saunders company features the following recent books in their full page advertisement appearing elsewhere in this issue:

1964 Current Therapy Volume

New!—Today's best treatments—ranging from up-dated information on general immunization to newer agents in Rx of meningitis.

Bockus—Gastroenterology

New (2nd) Edition!—An eminent 3-volume work. Covers all known primary and secondary disorders of the digestive tract and its appendages.

Reuter—Atlas of Urologic Endoscopy

New!—Explains in word and picture precisely how to use the endoscope.

PERSONALS

Luther L. McDougal, Jr., Charles P. Tharp, and Marion M. Winkler, Jr., have announced their association in the practice of medicine at the Infants', Children's and Adolescents' Clinic in Tupelo. Dr. McDougal received his medical degree from Vanderbilt University, Nashville, Tenn. and interned a year at Vanderbilt Hospital, a year at New York City, and two and one-half years in Providence, R. I. Receiving a medical degree from the University of Tennessee, Memphis, Tenn., Dr. Tharp interned at St. Joseph Hospital, Memphis, and served a residency at John Gaston Hospital, Memphis, Tenn. Dr. Winkler obtained his medical degree from Tulane University School of Medicine, interned at the Confederate Memorial Medical Center, Shreveport, La., and completed his residency at the University of Mississippi School of Medicine and St. Louis Children's Hospital, St. Louis, Mo.

Howard A. Nelson was recently elected president of the Greenwood Chamber of Commerce.

Joseph H. Shoemaker has been elected a director of the Okolona Chamber of Commerce.

DEATHS

Kirby, Carl David, Lula. M.D., Tulane University School of Medicine, New Orleans, La., 1912; died Dec. 3, 1963, aged 73.

Waldrop, Henry Griffin, Booneville. M.D., Memphis Hospital Medical College, Tenn., 1912; interned St. Joseph Hospital, Memphis, Tenn.; received certificate from the University of Tennessee College of Medicine, Memphis, for 50 years of medical service; Emeritus member of MSMA; died Dec. 10, 1963, aged 77.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

Barkley, Jare Lyons, Pass Christian. Born Greenville, Miss., Nov. 29, 1928; M.D., Harvard Medical School, Boston, Mass., 1954; interned Barnes Hospital, St. Louis, Mo., one year; residencies, Boston City Hospital, Mass., and University of Mississippi School of Medicine, Jackson; certified by the American Board of Surgery; captain, U. S. Air Force, two years; elected Nov. 8, 1961, by Coast Counties Medical Society.

Wamnes, Leonard Byron, Jr., Picayune. Born Mt. Vernon, N. Y., July 31, 1925; M.D., Tulane University School of Medicine, New Orleans, La., 1958; interned Confederate Memorial Medical Center, Shreveport, La., one year; general surgery residency, Confederate Memorial Medical Center, Shreveport, La., four years; elected Oct. 14, 1963, by Pearl River County Medical Society.

State Morbidity Reported Through Jan. 3

The Mississippi State Board of Health reports the following occurrence of morbidity for 1964 through the first week of the year, ending Jan. 3, 1964. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	23
Tuberculosis, O. F.	2
Mononucleosis, Infectious	1
Hepatitis, Infectious	1
Helminthic Infections	
Ascariasis	1
Streptococcus infections	
Strep Throat	128
Scarlet Fever	2
Measles	7
Chickenpox	39
Mumps	31
Influenza	40
Gonorrhea	105
Syphilis	
Early	8
Late	5

The President Speaking

'Medicine's Morality'

JOHN G. ARCHER, M.D.
Greenville, Mississippi

To nearly every American, the Constitution of the United States is the most important single document in the history of the republic. Very few, however, have seen a copy of it since their attendance upon a course in high school civics. For physicians, the *Principles of Medical Ethics of the American Medical Association* is the most singularly significant document relating to the medical profession. But as with the Constitution, the chances are that few American physicians have read this magnificently brief declaration of morality for healing. Probably even fewer know the fascinating story of its genesis.

What was begun by Hippocrates three centuries before Christ has been continued by ethical, scientific medicine. In 1803, Percival published his *Principles of Medical Ethics* which became the basic format for those adopted at the founding meeting of the American Medical Association at Philadelphia in 1847. In the dozen decades since, this document in its various forms has become the most celebrated and best known system of ethics in our present culture. The current version, a document of about 500 words, is new, having been adopted in 1957 after two years of laborious writing and debate.

The former *Principles,* with augmentations and amendments, had become a cumbersome and unwieldly affair of a preamble and 47 sections, cluttered with the dicta of etiquette and manners intermingled among guides for moral conduct and professional obligation. Our present 10 section *Principles* is a model of clarity and objectivity. In the fewest possible words, it exhorts the physician to dedication, competency, honesty, responsibility, moral attainment, and good citizenship. It is worthwhile reading, and it may be fairly said that medical ethics bears the same general relationship to the constitutions and by-laws of medical organization that the Declaration of Independence does to our U. S. Constitution.

Today's doctor of medicine with his better training, great care capability, and his vast armamentarium of healing aids possibly has less time for introspective reflection than his predecessor of past generations. An occasional rereading of the *Principles* is a satisfying three minute return to this lost pleasure. I shall be happy to send a copy to any member who sends me a card. ★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume V, Number 2

February 1964

EDITORIALS

Thunder on the Left: Humphrey Speaks Again

I

THE INDEFATIGABLE SENATOR from Minnesota, Hubert Horatio Humphrey, a study in liberal loquacity, has a habit of playing loose and fast with the facts. Many recall his celebrated proclamation that additional taxes required to finance the King-Anderson program of compulsory federal medical care for the aging under Social Security were only $13 per year. Actually, the increase during the first year under fedicare would be $55 per taxpayer. From his left field position on the New Frontier club, he has tossed in another smoke ball, aimed this time at the medical profession and the ethical pharmaceutical industry.

In a lengthy new release, the senator said he "has asked the Food and Drug Administration to make an immediate review of a drug now on the market which may, according to one physician, be associated with 'in excess of 100 deaths.'" Continues Humphrey: "A physician in one of America's great teaching hospitals wrote (to him) on December 2 about the drug." The communication was severely critical of "weaknesses in insuring the drug's safety at five junctures," the statement continued.

The unnamed physician was quoted as condemning preclinical data on the preparation, stating that no controlled clinical tests were conducted prior to unrestricted distribution of the drug, calling clinical case reporting of its use inefficient and unreliable, accusing the manufacturer of failing to inform the profession of evidence against the product, and alleging that "no responsible party has taken the decisive step to cause the drug to be removed from the market."

Incredibly, Humphrey blatantly stated in the news release bearing his name that the "suspect drug cannot be named at the present time because the whole file is now under federal review."

II

If Senator Humphrey is genuinely dedicated to the public interest with the degree of nobility which he assigns himself in his speeches and endless public statements, then he has the duty and obligation to name the drug and his source of one physician in one teaching hospital. Not that this would make a very convincing case, however, if this is the only condemnation of the preparation which, in the senator's own words, is in "unrestricted distribution."

Not one to let an opportunity elude him, Humphrey says that his subcommittee's "watchful interest has enabled this and other physicians to speak up for their rights" and that includes, he adds, "the right to have the Food and Drug Administration take prompter action to protect the public against hazardous drugs."

Just what the liberal solon means by "hazardous" is overlooked or conveniently omitted. Respected authorities are generally in agreement that any drug, improperly used, can be hazardous. Annually, for example, dozens of deaths are attributed to aspirin, perhaps the most ubiquitous of all medicaments.

Moreover, the unnamed physician has been remiss in his professional obligations, if the news release can be believed. This doctor needs no subcommittee of the United States Senate to enable him to speak up for his rights. His obligation is to report his 100 deaths through open channels of scientific communication, and the pages of more than 400 reputable medical journals are open to him for this purpose.

III

And while the senator sheds alligator tears for the wretched, unprotected public, damned to swallow the toxic products of the avaricious, insouciant drug makers, he accuses in secret and conceals the name of his chief witness. How would this senator and his 99 colleagues respond if it were stated that a member of that body were guilty of murder but neither the accused nor the accuser could be named?

This is a wanton, calculated smear upon the pharmaceutical industry which, at best, lessens public confidence and at worst, destroys all concepts of its service and progress. Nobody—and especially spokesmen for the pharmaceutical industry—claims for a moment that all drugs are perfectly safe or are perfect in purpose. What they do say, and with truth and authority, is that drugs are as safe as they can scientifically be made. Countless millions are living thousands of years longer because of the vast armamentarium of pharmacy in the hands of medicine.

As Senator Humphrey thunders from the left, the noise ought to awaken him to put the same degree of responsibility in public office as the pharmaceutical industry and the medical profession have placed in their respective dedications to the good health of the nation.—R.B.K.

The High Protein Medical-Health Budget

Health and medical programs of Mississippi—however adequately or inadequately financed—are major undertakings. As a matter of fact, the aggregate of all such programs is the second largest public expenditure being made from state funds during the 1964-66 biennium.

The regular session of the legislature has before it a budget of almost $329.5 millions. State funds for medical and health activities approved by the Budget Commission total $32.1 millions, virtually 10 per cent. Only the giant public education appropriation proposal of $210.8 millions exceeds the medical and health requests.

Although the legislature must provide for $20 millions in new revenues to meet total minimum proposals, the Budget Commission approved increases of more than $1.9 millions for medical and health activities over the 1962-64 biennial appropriations. Agencies with health and health-related functions received increases ranging from 2.17 per cent up to 87.5 per cent over the past two years. Even so, the budget approval fell short of amounts requested by millions. It is reasonable to conclude that little, if any, budgetary fat may be found in medical and health funding schedules. —R.B.K.

The Crashing Story of Glass Houses

The American people are ingenious beyond belief in discovering weird, esoteric ways of clobbering themselves. About 10,000 are injured each year while playing golf. Tongues are speared on the tines of forks at meal time. Injuries to milady's eyes and lungs from hair sprays have been reported.

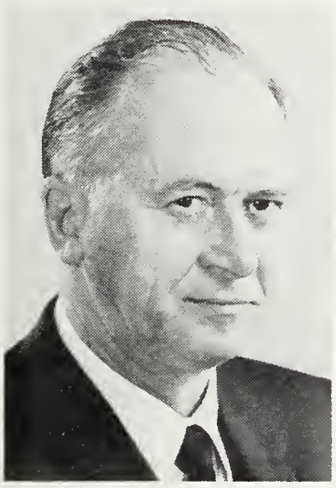
But the glass door syndrome seems to be getting uncomfortably frequent, and ridiculous as it may sound, it's no laughing matter. The American Medical Association reports that an estimated 40,000 persons tried to walk through glass doors, window walls, and picture windows last year. About 6,000 were hospitalized, and some died from severe cuts and blood loss.

The U. S. Public Health Service made studies of glass door injuries in Dade County (Miami), Florida, two years ago, and these investigations have been continued in other localities. Findings show that two-thirds of the injuries occur to males, while children between 5 and 14 years account for a third. About three-fourths of the mishaps are in the home, and in three out of four instances, the shattering experience comes when the victim is trying to pass from the inside to the outside.

So serious and frequent has this hazard become that some few communities have amended residential building codes to require safety glass in doors and panels. AMA observes this as a good preventive measure, saying that "safety glass can raise a bump, but it won't shatter and cut." The report suggests decorative taping to warn that glass isn't just daylight. Except in rare instances of a stumbling fall, glass door injuries are almost entirely preventable. Let's look—and think—before we crash.—R.B.K.

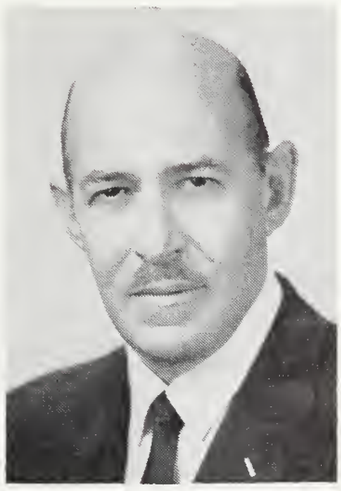
Health Quackery and Narcotic Addiction Head Program Fare at 96th Session

Two special program features will highlight the three day Scientific Assembly at the 96th Annual Session at Jackson, May 11-14, following the pattern of additional, major presentations established in 1962 and 1963. This was the announcement of Dr. C. G. Sutherland, chairman of the council charged with organization of the large and varied program.



Mr. Field

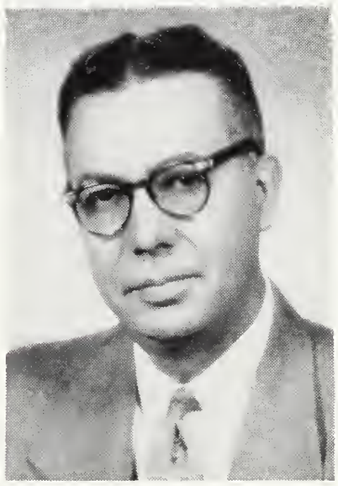
A Congress on Health Quackery will head the program on May 13. Nationally known speakers scheduled to appear include Oliver Field of Chicago, director of the AMA Department of Investigation; Dr. Martin Dobelle of Washington, Bureau of Medicine, Food and Drug Administration; and Dr. William H. Gordon, an internist from Lubbock, Texas. Dr. John G. Archer of Greenville, state association president, will deliver the congress' keynote address.



Dr. Dobelle

The Section on General Practice will present a Symposium on Narcotic Addiction on May 14, Dr. Sutherland said. Speakers include the director of the U. S. Public Health Service Hospital at Lexington, Ky., Dr. Robert W. Rasor; Hon. Carl DeBaggio of Washington, D. C., chief counsel to the U. S. Bureau of Narcotics; Dr. John B. Howell, Jr., of Canton; and Dr. W. L. Jaquith of Whitfield.

Augmenting the congress' speakers will be special exhibits on health quackery dangers and practices from the American Medical Association and the Food and Drug Administration, co-sponsors of the recent Second National Congress on Health Quackery at Washington. MSMA members may invite nonmedical associates and community leaders as guests, the announcement said.



Dr. Gordon

Mr. Field, a veteran AMA staff executive, is recognized nationally as one of the leading authorities on quackery. His office, the Department of Investigation, has collected information on health frauds and nostrums for more than 25 years. Dr. Dobelle, an orthopaedic surgeon on the FDA medical staff, is known for his extensive knowledge of "device quackery," and he has been effective in court prosecutions of those promoting worthless gadgets for which cures were falsely claimed. Dr. Gordon, a private practitioner, is widely sought as a speaker in this subject area.

Dr. Rasor

The special presentation on narcotic addiction will have broad appeal to association members, regardless of specialized professional interests. Dr. Howell, vice chairman of the Board of Trustees, will discuss state association and AMA policy on narcotism. Mr. DeBaggio, an attorney

who devotes himself exclusively to law in this area, will speak on legal aspects, while Dr. Rasor, the director of the Lexington hospital, will discuss institutional treatment of the addict. Dr. Jaquith, director of the Mississippi State Hospital, will describe case categories, psychiatric findings, and treatment procedures in the state.

Mr. DeBaggio

Equally appealing programs are scheduled for Sections on EENT, Pediatrics, Medicine, Surgery, Obstetrics and Gynecology, and Preventive Medicine. Following the House of Delegates initial meeting on May 11, the Scientific Assembly will open on May 12, presenting three sections. The Congress on Health Quackery will occupy the morning of May 13 with two sections in the afternoon. The final two section meetings are set for the morning of May 14 with the adjourned meeting of the House closing the annual session that afternoon.

Principal speaker from among more than 50 scheduled will be Dr. Edward R. Annis of Miami, president of the American Medical Association, who will speak on May 11. The annual association banquet and dance, the social highlight, will be conducted on Wednesday evening, May 13.

Specialty societies will meet in luncheon, banquet, and scientific sessions during the week. Medical alumni representing Ole Miss, Tennessee, and Tulane have scheduled banquet-dance occasions. Estimated attendance will be more than 1,200 for the four day meet, association spokesmen say.

Members of the Council on Scientific Assembly are Drs. C. M. Murry of Oxford, J. Roy Bane of Jackson, Frank L. Butler of McComb, Mary Ward of Corinth, J. Manning Hudson of Jackson, Eugene A. Bush of Laurel, Alton B. Cobb of Jackson, and C. G. Sutherland, the chairman.

Medicine and Religion Committee Is Named

A six member Committee on Medicine and Religion has been named by the Board of Trustees to direct association activities in this new field. Named to the *ad hoc* body were Drs. S. Lamar Bailey of Kosciusko, John M. Alford of Greenwood, Andrew K. Martinolich, Jr., of Bay St. Louis, Frederick C. Minkler, Jr., of Pascagoula, Eugene M. Murphey III of Tupelo, and Julian Wiener of Jackson. Dr. Bailey will serve as chairman.

Outlining the duties and responsibilities of the new committee, the Board said the body would "be responsible for developing a program to create *rapport* and communication between physicians and clergymen toward the end of assuring the best care and treatment of patients." The charge recognized that "man cannot be separated into parts for the care and treatment of injury and illness" and that in ill health, he requires total care and treatment.

The state association initiated its program at the 95th Annual Session in May of 1963 with the presentation of the first Seminar on Medicine and Religion before which four prominent theologians and three physicians appeared. The September 1963 issue of JOURNAL MSMA was devoted to publication of the papers given before the seminar.

At national level, AMA has created a full time Department of Medicine and Religion of which the Rev. Dr. Paul B. McCleave is director. The new MSMA committee will work closely with the AMA program.

Mid-South Schedules 75th Annual Meeting

The Mid-South Postgraduate Medical Assembly has scheduled its 75th annual meeting for Feb. 11-14, 1964, at the Peabody Hotel, Memphis, Tenn., according to an announcement by Dr. Stanley A. Hill, president.

General surgery, internal medicine, obstetrics and gynecology, pediatrics, radiology, medicine and religion, and urology are among the categories on the program to be discussed by prominent physicians from all over the United States.

Speakers for the program will include: Dr. Owen H. Wangensteen, Minneapolis, Minn.; Dr. Warren H. Cole and Rev. Dr. Paul B. McCleave,

Chicago, Ill.; Dr. Milford O. Rouse, Dallas, Tex.; Dr. Ernest W. Page, San Francisco, Calif.; Dr. Harry C. Shirkey, Birmingham, Ala.; Dr. Robert D. Moreton, president, Southern Medical Association, Fort Worth, Tex., and Dr. Wyland F. Leadbetter, Boston, Mass.

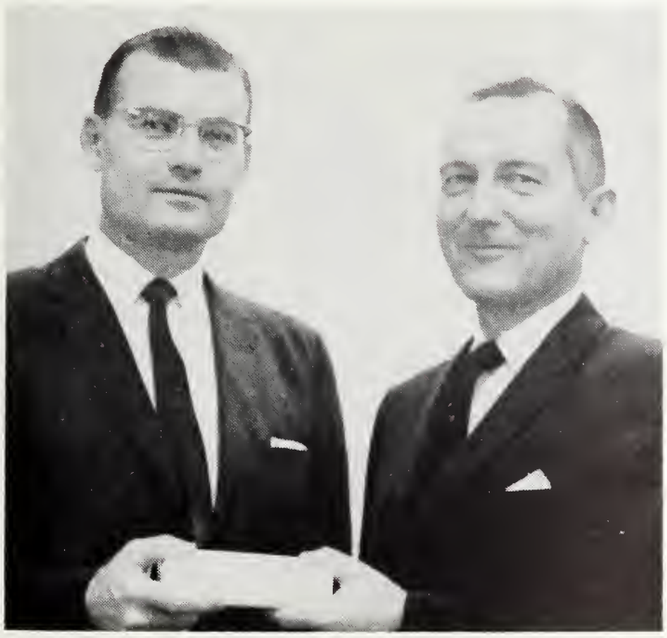
Dr. G. Swink Hicks of Natchez is vice president for Mississippi.

Dr. Webb Receives High MHA Award

A Mississippi Heart Association distinguished achievement award went in January to Dr. Watts R. Webb, formerly professor of surgery at the University Medical Center. Dr. Webb is presently professor of surgery and chief of the thoracic division at Southwestern Medical School in Dallas.

Reserved for those few who make outstanding scientific contributions in the heart association program, the MHA distinguished achievement award has been presented to only one other person. Dr. Arthur C. Guyton, UMC professor of physiology, was the recipient in 1958.

Dr. VanLandingham, in making the award presentation, pointed to the Mississippi surgeon's work on the role of the myocardium in shock due to adreno-cortical insufficiency, to transplantation of hearts and lungs in dogs which indicated five years ago that cardiac transplantation can be a reality, and to his recently reported findings that alcohol decreases coronary flow.



Dr. Watts R. Webb, left, receives the Mississippi Heart Association distinguished achievement award from Dr. D. J. VanLandingham, MHA awards chairman.

Dr. Webb's seed grant support came from the Mississippi Heart Fund during his first years at the University where he had been on the faculty since 1955. He served on the MHA professional education committee which is responsible for the cardiovascular, cardiac nursing, and nurse anesthetist seminars.

Three Physicians Named To State Health Board

Dr. Lamar Arrington of Meridian, Dr. Joseph L. Guyton of Pontotoc, and Dr. Ashford H. Little of Oxford were recently named to six-year terms on the State Board of Health by Governor Ross R. Barnett. The appointments became effective Jan. 1, 1964.

Drs. Joseph Guyton and Ashford Little succeed Drs. N. C. House of Batesville and J. K. Avent, Sr., of Grenada. Dr. Arrington was reappointed after serving one term.

Appointments to the Board are made from a list of nominations submitted to the governor by the Mississippi State Medical Association.

Membership, Profession Grow in 1963

Membership in the Mississippi State Medical Association and the physician population of the state reached new highs in 1963, according to studies just released by the association's Membership-Directory Department. On a four year comparison basis, total membership rose 4 per cent, and the number of paid, active members was up 6 per cent. The state had 1,880 physicians on Dec. 31, the studies disclosed.

Eleven of the association's 16 component medical societies reported renewing 100 per cent of eligible members from 1962, and eight enjoyed an increase in membership. At the old year end, there were 1,365 members in good standing, an adjusted total which did not include those who died or moved from the state in 1963. Of these, 1,209 were paid, active members, 90 were Emeritus members, and 66 were exempt for various reasons.

The greatest growth of physician population was in the eight county area of the Central Med-

ical Society, including Jackson, where 559 physicians are located. Of the state's total, 1,823 are white and 57 are non-whites. The studies observed that the growth rate of physician population in Mississippi greatly exceeded that of the general population.

Dr. Pace To Head Tri-County Society

Dr. Brantley B. Pace of Monticello was elected president of the Tri-County Medical Society at the group's Dec. 17 meeting. He succeeds Dr. Jim C. Barnett, Jr., of Brookhaven.

Dr. Aubrey V. Beacham of Magnolia was re-elected secretary-treasurer of the society which does not have a president-elect.

During the program, Dr. John G. Archer of Greenville, president of MSMA, addressed the society.

AMA Simplifies By-Laws Terminology

Editorial changes in the by-laws of the American Medical Association will soon show up on every physician's membership card. Acting at the recent Portland clinical meeting, the House of Delegates, upon recommendation of the Council on Constitution and By-Laws, voted extensive simplifications involving semantical rather than substantive changes.

Henceforth, all AMA memberships will fall in one of only two categories, active and special. The former includes the regular, dues-paying members and service members who are active or retired federal medical officers of the armed services, Veterans Administration, and U. S. Public Health Service. Special members include associate, affiliate, and honorary categories.

Two important changes in terminology affect meetings. The term "session" will no longer be applied to AMA meetings. Rather, these will be called "conventions." The body of sections and specialty societies, known for years as the scientific assembly, is now designated as the postgraduate assembly.

The changes do not affect the rights and privileges of membership nor do they alter the benefits and obligations.

Type I Sabine Vaccine Given to 266,000

Central Medical Society officially opened its polio immunization campaign Jan. 12, when approximately 266,000 persons from the eight-county area turned out to receive the Type I Sabin oral vaccine.

Approximately 66.5 per cent of an expected 400,000 persons visited 101 clinic sites set up at designated schools in Hinds, Leake, Madison, Scott, Simpson, Smith, Rankin, and Yazoo counties.

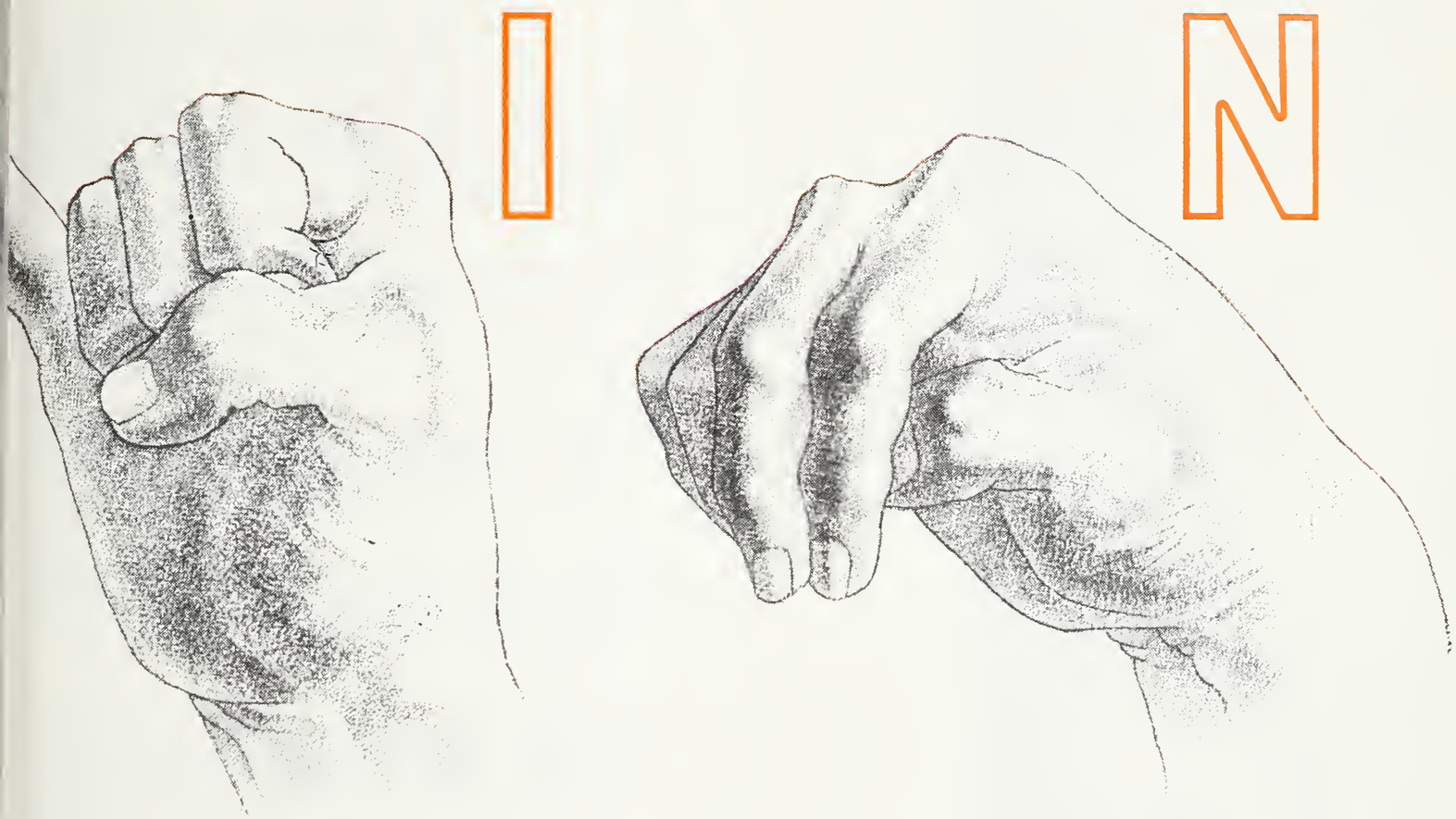
Similar immunization drives were begun at the same time in the counties of Leflore, Forrest, Perry, Lamar, and Pearl River, all five counties experiencing record turnouts.

Types II and III Sabin oral vaccine will be administered Feb. 16 and March 22 in Central Society's eight-county area, Leflore County, and the four-county area of Forrest, Perry, Lamar, and Pearl River.

Northeast Honors Fifty Year Club Initiates

Fifty Year Club honorees at the recent Northeast Mississippi Medical Society meeting are, seated from the left, Drs. H. L. Scales, R. G. Dabbs, and E. K. Guinn. Standing are society president Jack M. Senter and honorees W. J. Aycock, R. B. Caldwell, and B. C. Tubb. (Photo by Sallis, Tupelo Journal)

thritic joints from



arthritis, rheumatoid spondylitis, osteoar-
bursitis, fibrositis, and neuritis. Arthralgen
be used for analgesia in colds, flu, and
s myalgias.

GE: One or two tablets four times a day.
remission of symptoms, dosage should be
ed to the minimum maintenance level.

EFFECTS: Nausea, GI upset, or mild salicy-
nay rarely occur. Symptoms of hypercorticoid-
ictate reduction of dosage of Arthralgen-PR.

AUTION: Reduction in dosage of Arthral-
PR given over a long period should be gradual,
abrupt.

TRAINDICATIONS: Hypersensitivity to any
dient.

ith any drug containing prednisone, Arthral-
PR is contraindicated, or should be adminis-
tered only with care, to patients with peptic ulcer, tuberculosis, nephritis, diabetes mellitus, acute psychoses, Cushing's syndrome (or Cushing's disease), overwhelming spreading (systemic) infection, or predisposition to thrombophlebitis.

Arthralgen-PR is generally contraindicated in patients with uremia and viral infections, including poliomyelitis, vaccinia, ocular herpes simplex, and fungus infections of the eye. It is also contraindicated in patients with chicken pox or susceptible persons exposed to it.

SUPPLY: Arthralgen (white, scored) and Arthralgen-PR (yellow, scored) tablets are available in bottles of 100 and 500.

*Cohen, et al: J.A.M.A., 165:225, 1957.

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he'll like the way
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*By liquefying secretions in the respiratory tree, Cheracol makes it easier for the patient to cough—in accord with the physiologic defense mechanism.

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MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Meeting, June 21-25, 1964, San Francisco, Calif. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn, Chicago 10, Ill.

American Academy of General Practice, April 11-16, 1964, Atlantic City, N. J. Mr. Mac F. Cahal, Volker Blvd. at Brookside, Kansas City 12, Mo.

American College of Surgeons, Clinical Congress, Oct. 5-9, 1964, Chicago. Samuel P. Harbison, Secretary, 40 East Erie, Chicago 11, Ill.

Mid-South Postgraduate Medical Assembly, Feb. 11-14, 1964, Memphis, Tenn. Mr. Leslie Adams, Executive Secretary, 774 Adams St., Memphis 5, Tenn.

Southern Medical Association, Nov. 16-19, 1964, Memphis, Tenn. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 11-14, 1964, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday, January, First Wednesday, March, May, July, September, November. Charles N. Floyd, 1619-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Robert M. Graham, 612 Dixie Towers, Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. Robert B. Townes, Jr., 1196 Mound St., Grenada, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 420 Magazine, Tupelo, Secretary.

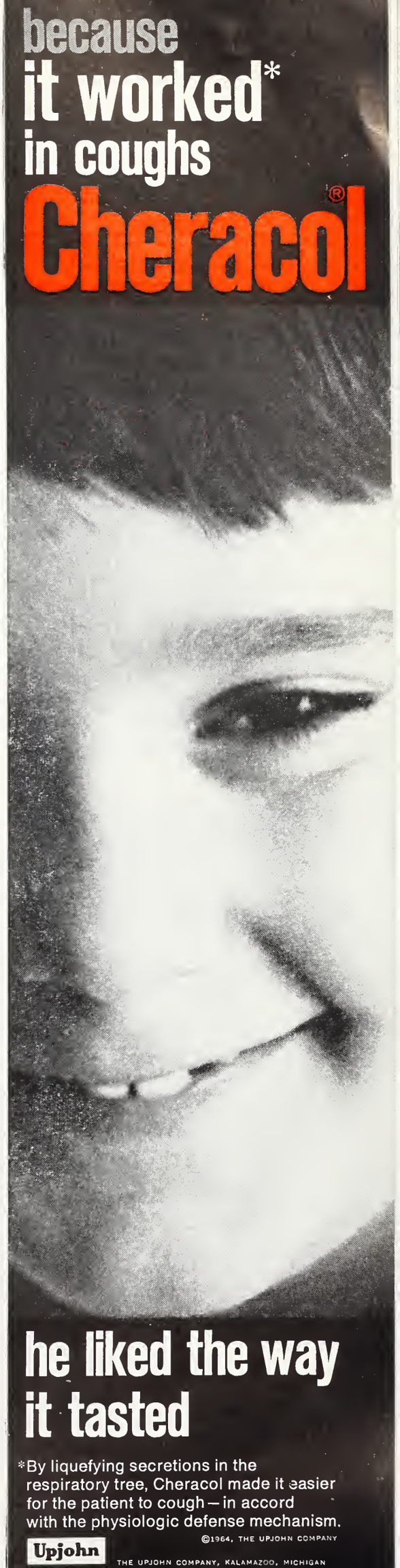
North Mississippi Medical Society, First Thursday April and October, Oxford. Marcus E. Morrison, 512 Van Buren Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucien Olen Crosby Memorial Hospital, Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.



Health Coverage Extends to 145 Million

In 1963 the health insurance business helped to protect an estimated 145 million Americans against the costs of their health care, according to the Health Insurance Institute. The total figure represents an increase of 3.6 million persons over the number protected in 1962 and stands at 77 per cent of the civilian population.

Total benefits paid to insured persons by all insuring organizations over the year were estimated at $7.8 billion, or some $700 million more than were paid out in 1962. The insuring organizations include 879 insurance companies, 77 Blue Cross and 71 Blue Shield plans, and nearly 800 other health care plans.

The institute reported that new records were established in five types of basic health insurance coverages—hospital, surgical, regular medical, major medical, and loss of income—as well as in the respective amounts of benefits paid to insured persons.

A comparison of 1953 and 1963 coverage and benefit totals showed that a decade ago 97.3 million Americans had health insurance protection, 47.7 million fewer than the 145 million protected in 1963. Benefit payments in 1953 came to nearly $2.5 billion by all insurers, as compared to $7.8 billion in 1963.

Short-Term AHA Grants Available For Research

American Heart Association awards for research in medical education are now available on a short term basis to physicians who wish to analyze specific problems in this area but cannot devote full time to the work.

Inaugurated by the Association's Committee on Professional Education, the new awards were designed especially for physicians who wish to devote perhaps two months to learning techniques for analyzing specific problems which may arise at their institutions. Two short-term grants, each carrying a $2,500 stipend, will be awarded yearly.

Application forms are available from the Director of Medical Education, American Heart Association, 44 East 23rd Street, New York, N. Y. 10010.

The always-sleepy patient may be a shallow breather

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Arthritis Seminar Set For Feb. 28

The University of Mississippi School of Medicine has scheduled its third annual Arthritis Seminar for Feb. 28.

Four guest speakers will cover various aspects of arthritis and rheumatic disease in the one-day program. Dr. Oren B. Gum, associate professor of medicine at Tulane University School of Medicine, will discuss ankylosing spondylitis. Dr. Carl Pearson, internist from the University of California Medical Center in Los Angeles, will talk on dermatomyositis and its various manifestations. Dr. Gordon Martin of the Mayo Clinic, Rochester, Minn., will discuss how physical medicine can be used in the treatment of joint diseases, and Dr. Eugene Lunceford, associate of the late Dr. Austin Moore, the orthopedist who developed the Moore hip prosthesis, will discuss arthroplasty of the hip.

The continuing education course on arthritis is supported by educational grants from the Mississippi State Board of Health and the Mississippi Chapter, Arthritis and Rheumatism Foundation. Approval of attendance for category 1 postgraduate credit has been requested from the Mississippi Academy of General Practice.

Current Film Catalog Now Available

A catalog containing descriptions of 169 motion pictures suitable for viewing by a nonmedical audience and pertaining to the health field has been issued by the Pharmaceutical Manufacturers Association.

The films are available on a free loan basis to both lay and professional groups. They cover such widely-discussed topics as accidents, alcoholism, allergies, geriatrics, dental care, mental health, and home safety. On the more technical side, the films cover drug research, scientific agriculture, arthritis, open heart surgery, and the treatment of specific conditions of the digestive system, the heart, the lungs and kidneys.

Copies of the catalog are available upon written request to the Director of Public Information, Pharmaceutical Manufacturers Association, 1411 K Street, N.W., Washington, D. C. 20005.

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References: 1. Dobkin, A. B., *et al.:* Scientific Exhibit, AMA Meet., Chicago, 1962. 2. Miller, M., *et al.:* Clin. Pharmacol. and Therap. *2*:689, 1961. 3. Miller, W. F., *et al.:* J.A.M.A. *180*:905, 1962. 4. Treadwell, T. W., Jr., *et al.:* Nat. Tuberc. A. & Am. Thoracic Soc., Miami Beach, 1962. 5. Buckley, J. P., *et al.:* J. Pharmaceut. Sciences *51*:157, 1962. 6. Aronovitch, M., *et al.:* J. Canad. M. A. *85*:875, 1961. 7. Said, S. I., and Banerjee, C. M.: Am. J. Med. *33*:845, 1962. 8. Noehren, T. H.: J.A.M.A. *182*:889, 1962.

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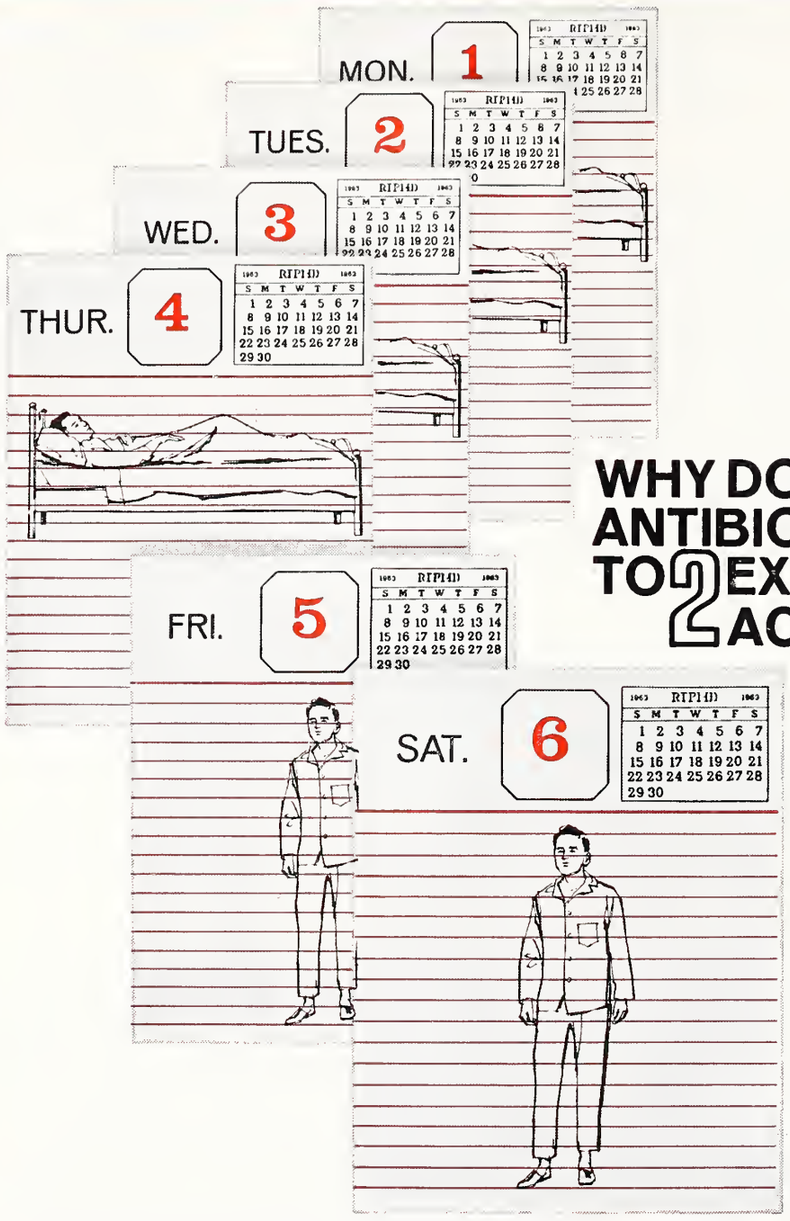

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Volume V
Number 3
March 1964

JOURNAL of the Mississippi STATE MEDICAL ASSOCIATION

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The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi; office of publication, 1201-5 Bluff Street, Fulton, Missouri. Subscription rate, $5 per annum; $1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

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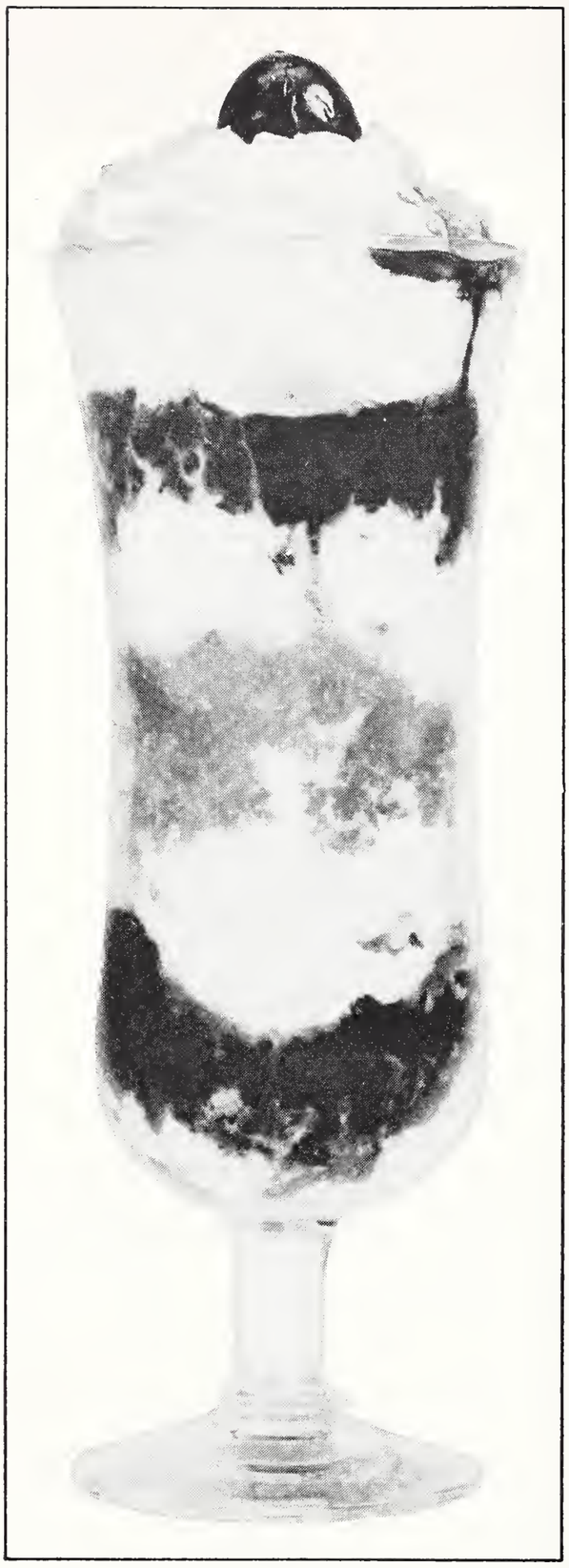

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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

March 1964

Dear Doctor:

LBJ's "total health" message to the Congress, although a political liberal's dream of something-for-everybody, was strangely ironic. The lengthy catchall did not contain a single reference to the recent report on tobacco and health. Message stressed fedicare, vastly increased federal funds for medical facilities, health manpower, research, area planning, air and water pollution, pesticides, and even a new commission on strokes.

> Omission of smoking-health issue is obviously political payola to the seven tobacco states, all overwhelmingly Democratic. Fifty-three of the 63 Representatives from Fla., Ga., Ky., Md., N.C., S.C., and Va., are Democrats, comprising 21 per cent of the party in lower house. Administration will need most of their votes in tight floor battles.

Physicians "down under" can get into hot water for failing to respond to emergency calls. Australian state of New South Wales passed law providing for legal investigation of complaints. Patient must deposit $11 which is forfeited if panel of inquiry, consisting of two physicians and a judge, finds no merit in complaint.

Newest service offered California doctors by huge Bank of America is near ultimate in professional office management. Using teletransmission - just dialing direct to a computer center, bank prepares all billings, makes daily reports, analyzes every account, reports number of patients seen, studies fees charged against time spent, and does office payrolls.

One major cigarette maker has come up with a unique response to the tobacco and health report. American Tobacco Company will soon market a new filter brand, "Carlton," with the tar and nicotine content printed on each pack. No health claims will be made and tests of smoke components will be made by independent research laboratory.

Insurance industry is pushing gains made in coverage for cost of care in nursing homes, says Health Insurance Institute. New study shows 32 major companies now offer specific nursing home policies, while many others have coverage included in major medical contracts. HII estimates 4.5 million have protection with benefits ranging from $5 to $26 per day for periods of 30 to 200 days.

Sincerely,

Rowland B. Kennedy
Executive Secretary

Uncle Sam Can Now Sue For Professional Liability

Washington - Under implementation of a new law, the federal government is now empowered to bring professional liability suits against physicians and hospitals for personal injuries suffered by patients whose care is a responsibility of the United States. Right of suit, however, is limited to instances when no private action is initiated. Legal basis is Title 42 of U.S. Code 2651-53. Only one such action has so far been filed: VA sued in behalf of a patient formerly under private care.

Maryland Tops States With Fluoridated Water

Chicago - The American Dental Association says that 93.8 per cent of Maryland's citizens drink water containing fluorides, topping the 50 state list. New studies show rank of states in percentages of population using natural or artificially fluoridated water supplies. ADA showed Mississippi 36th with 18.1 per cent. Utah was 50th at 2.7 per cent. Median percentage is 37.9 in South Dakota.

Pollution Waste Assimilation Data Goes EDP In NY

Albany - New York public health officials have turned to electronic data processing to solve sanitation problems for water resources bureaus. Use of computers now makes it possible to solve in minutes problems formerly requiring weeks in rate of pollution assimilation in rivers and lakes. Problems are compounded by varying amounts of industrial wastes dumped and changing water levels. Next step will be "pollution forecasts" by public health EDP experts.

Consumer 'Watchdog' Named By President

Washington - Quickly following his "consumer message" to Congress, President Johnson named Mrs. Esther Peterson of Washington as special adviser on consumer matters. She will head system of consumer panels to whip up interest in proposals to enact truth-in-packaging, safety-and-efficacy, and similar controls over consumer products. Health care field's greatest concern is limitations over development, testing, and marketing of new drugs.

New High In Hospital Costs Noted In '63

Chicago - The American Hospital Association said that the average cost in the nation's hospitals during 1963 was $36.83 per patient day. Report grew out of study of more than 7,000 hospitals caring for 100 million Americans, including outpatient visits, during the year. Per diem has jumped 100 per cent in 10 years, AHA contended, with 67 per cent of money going for personnel. Study showed hospitals now employ 2.37 persons per patient.

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
March 1964, Vol. V, No. 3

ORIGINAL PAPERS

Neurosurgically Correctible Congenital Anomalies

JULIAN R. YOUMANS, M.D., Ph.D.
Charleston, South Carolina

Neurosurgery should be considered in cases of congenital anomaly only when the child can be made happy and self-sustaining, writes the author. With this premise in mind, he discusses the management of several of the more common anomalies including spina bifida occulta, congenital dermal sinus, meningocele, encephalocele, hydrocephalus, and craniosynostosis.

CONGENITAL ANOMALIES affecting the central nervous system occur frequently enough to make them a common medical problem. A detailed and thorough study of a large segment of the population of the British Isles shows that the three major developmental anomalies, anencephalia, spina bifida, and hydrocephalus occur in about 1 in each 200 births of the normal population.[1] After one of these anomalies has occurred, the risk of malformation in a succeeding birth of the family rises to 2.77 per cent or 1 in 33 births.[2] Reliable statistics are not available as to the probability of an anomaly with the third birth after two previous ones. Obviously, the odds would be much higher. In counseling parents concerning further children after one of these tragic developments, it would appear a justifiable risk to have the second child; but, if lightening strikes twice, then the genetic odds are too great and surely the parents would wish to adopt their future children.

The title "Neurosurgically Correctible Congenital Anomalies" injects a note of hope into the problem. Perhaps it would be wise to deal with the most difficult problems first and then progress to the more hopeful ones. As the central nervous system develops embryologically, the neural ectoderm folds inward to form a tube. This progressive cleavage from the surface is one of the prime sources of developmental anomalies. The cleavage of the neural tissue may be complete and the error involve only the overlying bone, muscle, and fat. This lesion is called a spina bifida occulta. There may be no neurological deficit and in that case, no surgical intervention would be needed. Even though the neural element may be formed perfectly, the meningeal tissues may extend up to the surface without the enveloping cover of bony and subcutaneous tissue. This is a meningo-

From the Department of Neurosurgery, University of Mississippi School of Medicine, Jackson, Miss.
Read before the Section on Pediatrics, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

cele. If the midline development is even more disturbed, the neural elements may be involved in the lesion to form a myelomeningocele. Even a more severe anomaly is the myeloschisis where the infolding is incomplete and the neural elements remain at the surface. This lesion is invariably accompanied by a complete motor and sensory deficit below its level. It is not correctible and children with it should not have vigorous treatment of any of their problems.

SPINA BIFIDA OCCULTA

The spina bifida occulta is the anomaly that will be considered first. The most common form is with a bony abnormality only. Close inspection of spine x-rays will reveal some type of anomaly on about 25 per cent of the population. Usually these abnormalities are not clinically significant.

In the unusual incidence, there is a fusion defect of the bone, fat, and neural tissue. These cases frequently are symptomatic. The lesion extends down into the canal, and the neural elements are stuck to the fat and other abnormal tissue. Little or no trouble is caused by pressure alone. The nerve roots or cord are anchored by this intimate involvement with the lesion and symptoms are caused by stretching of the cord. As the body grows, the growth ratio of the spinal cord in the vertebral column is quite unequal.[3] In the third month of embryonic life the spinal cord and vertebral column are equal. By the time of birth the spinal cord has moved up to the third or fourth lumbar vertebra and by maturity the spinal cord has inched on up to about the level of the body of the first lumbar vertebra.

The presenting complaint will be cutaneous abnormalities in about 40 per cent of the patients with this lesion.[4] An abnormal tuft of hair, an angioma, a lipomatous mass, or a dimpling of the skin will be seen in the midline over the lesion. The lesions are usually in the lumbar area at the level of closure of the posterior neuropore. These children should be placed under close neurological surveillance. The development of a neurological defect indicates the need for operation and freeing up the spinal cord. Sixty per cent will present with neurological abnormalities or musculoskeletal defects and sphincter disturbances. Any child who begins to have clumsiness of the extremities, high arches, ulcers on the feet, atrophy of any of the muscle groups of the legs, or sphincter disturbances, should be checked very carefully to note any accompanying cutaneous abnormality. X-ray studies of the spine should confirm the diagnosis of a symptomatic spina bifida.

The indications for surgery depend on the possibility of rehabilitation of the child to be a happy and reasonably self-sustaining citizen. If the neurological defect is severe at birth with complete motor and sensory deficit below the lesion, it is

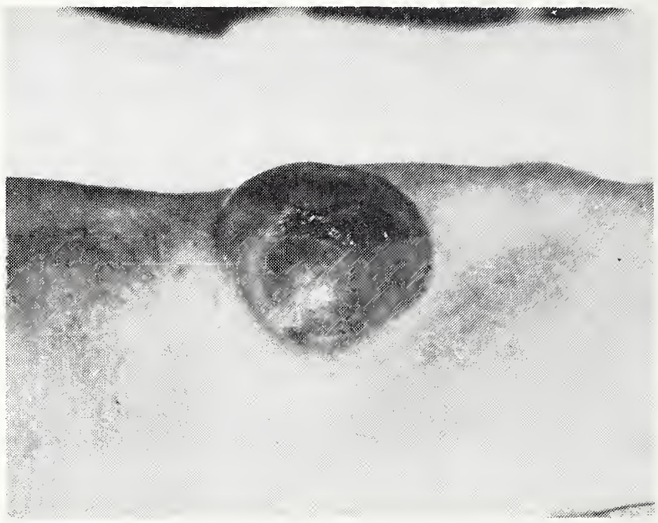

Figure 1. Midline congenital fusion defect of lumbar area of a two-month-old child. This type lesion may be a meningocele or a myelomeningocele.

the general consensus of neurological surgeons that the patient should not have any form of operative intervention. If symptoms are late in onset or there is progression of the difficulty, then there is every reason to operate. Occasionally, the myelogram may be of help in confirming the nature of the lesion and in deciding the time of the operation. In general, it is a wise policy to explore the patient at the earliest onset of progression of symptoms and then at the time of surgery to operate conservatively with freeing up of the neural elements as much as is possible without causing further damage. The results of surgery make this one of the more dismal neurosurgical lesions to treat. The operative mortality is nil and only a few are made worse, but the majority are only improved and not cured. A few are made normal or practically normal.

CONGENITAL DERMAL SINUS

Another midline fusion defect very similar to the spina bifida occulta is the congenital dermal sinus. It is a residual invaginating tract of squamous epithelium that forms from the third to the

fifth week of intra-uterine development.[3, 5] It is located in the midline and usually is in the lumbosacral or the occipital area. A draining sinus or indurated area of skin along the midline of the back or scalp is the clue to the diagnosis. Spine x-rays may or may not be helpful. The pilonidal sinus is a minor variant of this same problem. The importance of this lesion is that it may anchor or tether the cord as the spina bifida occulta and cause symptoms in the same manner. In addition, it is a source of bacterial contamination from the surface of the skin into the central nervous system.[6] It should be suspected in children who have a history of recurring meningeal infections. The treatment is complete excision and the results are good unless there has been damage to the nervous system by the previous infections.

DIFFERENTIAL DIAGNOSIS

When presented with a midline lesion such as shown in Figure 1, the problem is evident, but the differential diagnosis may not be easy. The defect may be a meningocele or a myelomeningocele. The essential difference is the absence of nervous tissue in the sac in the meningocele and the normal neurological examination. The myelomeningocele may have involvement of the nervous tissue in the defect and any type of neurological abnormality below its level. Hydrocephalus is an infrequent accompaniment of the meningocele and will accompany or develop later in the overwhelming majority of the patients with myelomeningocele.

Almost all meningoceles should have an operative repair of the defect. The only question is the timing. It should be done immediately if the sac is extremely thin and will rupture, or if it is ulcerated or ruptured and is uninfected. The infected meningocele should be treated with massive antibiotic therapy for a brief time and then closed. Otherwise, all of them should be delayed for six to nine months so that the operative risk will be decreased by the relative growth of the child and the increase in his circulating blood volume. The results of their surgery are very good.

The question of operation of the myelomeningocele often provokes a controversy.[7] Certainly the defect should be repaired if the child has an adequate neurological function for ambulation and toilet training and has adequate mentation to be educated. If he has such a defect as to have total paralysis and complete sphincter loss below the level of his lesions, the author joins the majority of neurological surgeons who believe that this is an absolute contraindication to any type of surgery.[8] It would seem to be totally unjustified to perpetuate the misery of a child who is the object of derision from his playmates because of his dribbling of feces and urine, his complete paralysis, and frequently his low intellect as well. If operation is indicated, its timing is the same as with the meningocele.

ENCEPHALOCELE

The encephalocele presents no problem of diagnosis except for differentiation of it from a dermoid (Figure 2). It presents most frequently in the occipital area; however, it may occur at any place on the midline from the nasopharynx back around to the base of the skull. Because of its deformity being so obvious and the fact that its removal is extremely well tolerated, it usually is removed within the first few months after birth.

In recent years new developments in the therapy of hydrocephalus make it one of the lesions that we can begin to be hopeful about. The causes of hydrocephalus are multiple.[9] Because they

Figure 2. Encephalocele in newborn infant.

have about the same natural history regardless of cause we will not discuss its etiology. If a child develops hydrocephalus and it is untreated, he has a chance of about one in three of living to adulthood and about a five to six per cent chance of having an I.Q. of 75 or above and thereby being considered to be educable.[10, 11] His chances of having an absolutely normal I.Q. of 90 or above are even less. If modern treatment with a ventriculo-venous shunt is given, the odds of surviv-

ing to adulthood are doubled and the chances of having an I.Q. high enough to be educated are increased five to six times.

The shunt is performed with a one-way flow plastic valve that permits the fluid to flow out of the ventricles and down into the auricle of the heart (Figure 3). Reflux of blood from the heart to the ventricle is prevented. Despite the need for re-operation occasionally, the valves can be made to work well in a high percentage of cases.[12]

The next step in achieving proper care of children with hydrocephalus requires the cooperation of the general practitioner, pediatrician, and neurosurgeon. It is important to make the diagnosis early by noting head growth curves more carefully and having a very high index of suspicion of its presence. The child's head should be measured on regular visits to the physician's office through the first 18 months as a minimum. If there is any suspicion of hydrocephalus, he should have subdural and ventricular taps. Heretofore, we have considered the ventricular pressure to be like a spinal fluid pressure and normal if it were less than the 180 to 200 mm. H_2O range. Observation of many cases has shown that gradual enlargement of the ventricles may accompany pressures of 150 mm. H_2O or more. Any time a significant ventricular enlargement is shown on the air study and the ventricular pressure is above normal, it must be considered that hydrocephalus is present and damage is being done to the brain unless it is shunted and the pressure is returned to normal.

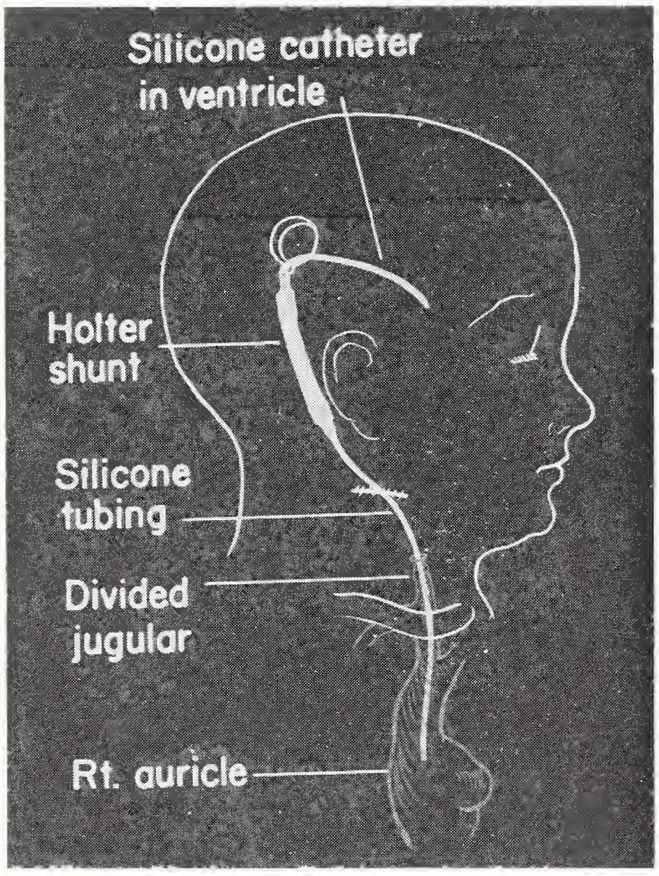

Figure 3. Drawing of positioning of Holter shunt. The burr hole is above and behind the ear. The valve and tubing is placed subcutaneously.

Often in the past, dilation of the ventricles has been noted and if a child were tolerating it without clear-cut symptoms or signs of increased intracranial pressure, it would be observed. The current approach is a more radical one with the desired goal being a normal ventricular size, a normal intracranial pressure, and hopefully a normal intellectual development. It is hoped that the cerebral mantle as measured from the edge of the ventricle to the edge of the skull will regain its depth. It should do so if the shunt functions properly.

Repeated ventriculograms can be done with readily absorbed carbon dioxide. This makes it possible to follow the ventricular size and pressure as well as the head growth rate. Admittedly, this is a much more aggressive approach than has been used with hydrocephalus in the past. It appears to be justified. Our tools have been inadequate in the past and we have tried to control hydrocephalus with a conservative approach. Now it would seem that the child should have a revision of his shunt any time that it is not working perfectly and the brain is being damaged by the increased pressure. Only by this approach can the number of mentally normal children be raised from the current one-third that we are achieving with the shunts.

CRANIOSYNOSTOSIS

Craniosynostosis is the next problem to be considered. It is not one of the most frequent, but it is one of the most important congenital lesions. This is true because it has disastrous effects if it is not detected and treated early. If detected early and treated properly, the results may appear miraculous. The difficulty is one of early ossification of the normal sutures of the skull. In the normal course of events the sutures are loosely separated at birth, are joined by a fibrous union by the fifth and sixth month of life and begin to have a serrated interlocking border by one to two years.[3, 4] A firm bony union does not occur until late in life. Why these children begin to have an early and abnormal closure or ossification of their sutures is not known. It is thought to be a congenital defect

of the germ plasm. The damage is done by the compression of the brain that causes an increased intracranial pressure. The brain grows enormously during the first year. It has a 135 per cent increase in weight. The skull should have 50 per cent of all its postnatal growth during that year. When a suture closes over, skull distortion and brain compression begin very soon.

The symptoms depend on how early the ossification began, how long it has been present, and the sutures that are closed. Eye abnormalities such as exophthalmos or papilledema occur only in the advanced state or with closure of several sutures so that there is a markedly increased intracranial pressure. Optic atrophy is a secondary one and follows sometime after the papilledema phase. Restriction of eye movements, mental retardation, and convulsions are late signs also. The diagnosis should be made long before they occur. Associated congenital abnormalities are markedly higher when the coronal suture is involved alone, but if this is not the case, there seems to be only the ordinary risk of anomalies involving the heart, gut, and extremities.[4] The fact that there is a higher number of associated anomalies with closure of the coronal suture is one of the reasons that the defect is thought to have a genetic basis.

The skull shape and the growth pattern is the main clue in the diagnosis of this difficulty. It is the one that should be noted early and long before any of the symptoms develop. The type of skull defect depends on the suture that is closed. If the sagittal suture closes, the skull growth comes from the coronal suture. The growth from side to side is restricted and the anterior-posterior growth is the compensating one. The head becomes long or boat-like and hence its name, scaphocephaly. When the coronal suture is closed early, the anterior-posterior growth is ended and the sagittal suture gives the compensating growth so that the head becomes short from front to back and very wide. This shape is called brachycephaly. If all the sutures are closed, the area of least resistance is the top of the skull. The skull remains small and becomes pointed from the upward growth. This shape is called oxycephaly. Palpation of the closed suture usually will reveal a ridge instead of the usual flat or depressed surface. X-rays of the skull will confirm the diagnosis.

DIFFERENTIAL DIAGNOSIS

There is very little difficulty with the differential diagnosis in any of this group except when all the sutures are closed and the head is generally small. In this case craniosynostosis must be differentiated from microcephaly secondary to agenesis of the brain. This is an important differential because surgery is urgently needed in one case and completely useless and contra-indicated in the other. The suture closure in microcephaly is due to lack of brain growth. The small size of the brain permits the sutures to fall together and any time that they have contact, they will close. In patients with craniosynostosis there will be increased intracranial pressures and evidence of development of brain function; in microcephaly there will be optic atrophy and little or no brain development.

The surgery for this difficulty is relatively simple and can be risked by a child of any age. It should be performed as soon as the diagnosis is confirmed by x-rays. If the sagittal suture is closed, the operation consists of a midline incision in the scalp and making a linear opening or

Figure 4. Anterior and lateral view of three-month-old infant with craniosynostosis of sagittal and coronal sutures. The head is abnormally long and unusually narrow because the sagittal suture closed much earlier than the coronal suture.

Figure 5. Routine skull films of child shown in Figure 4. The sagittal and coronal sutures are obliterated. The skull has a marked "beaten silver" appearance which is compatible with the patient's markedly increased intracranial pressure.

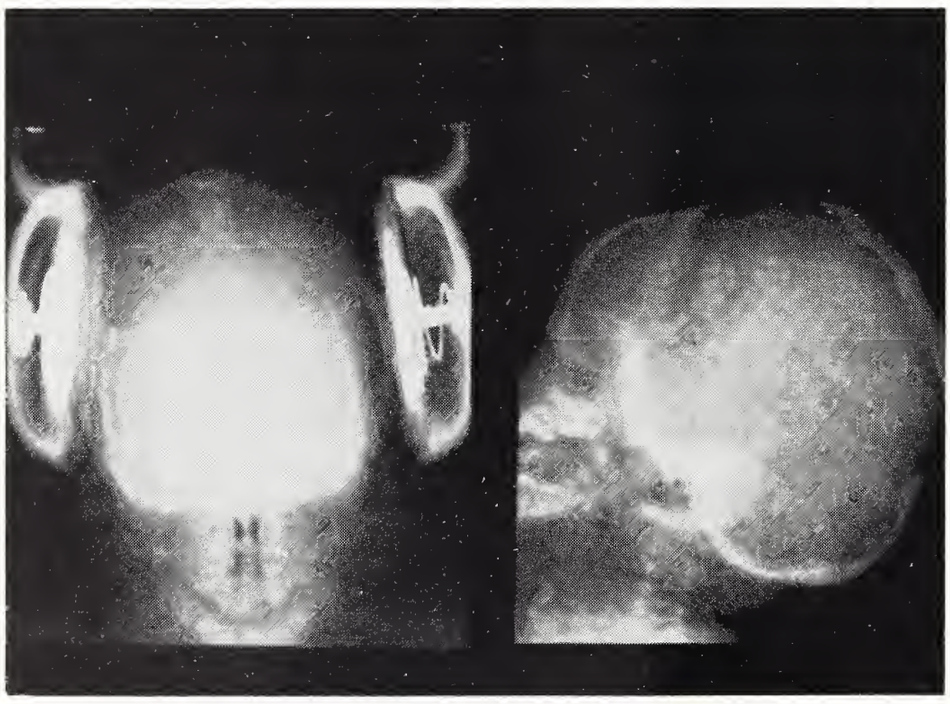

Figure 6. Follow-up films of child in Figure 4. They were taken three months postoperatively. The artificial sutures were made about one centimeter wide. They have spread to be several centimeters wide as the brain expanded to its normal size and resumed its normal growth pattern.

channel down either or both sides of it. The channel is connected to the coronal and lamboidal sutures. It is not advisable to go down the center where the suture has closed because of the possibility of danger to the underlying sagittal sinus. A polyethylene film is placed on the edge of the bone to retard the formation of bone across the scalp. Both tunnels can be accomplished during one operative procedure. If the coronal suture is involved alone or if it is involved together with the sagittal suture, a trans-coronal incision is made and the coronal sutures reopened in a single channel. Again the polyethylene film is placed about the openings to delay reossification.

Early closure of the sutures may cause a severe deformity of the head (Figure 4). X-rays confirm the closure of the coronal and sagittal sutures (Figure 5). From the shape of the skull, it is evident that the sagittal suture was closed long before the coronal one. Artificial sutures were made in both areas. The channels were made about one centimeter wide. They were pushed further apart as the brain responded to its normal shape. The improvement in head size and shape has been remarkable in the three months since the operation (Figure 6). Serial x-rays will be taken so that the artificial sutures can be reopened if they should close. By treating these children early and following them closely and reoperating when the question of reclosure of sutures arises, they are not harmed

and in fact this is the only way to insure their normality.

In summary, the approach to the surgical treatment of congenital malformations of the central nervous system has to be based on a broad experience as to the possible and a deep sense of responsibility for one's actions. There must not be a confusion of wanting to help and actually being helpful. It must not entail useless and meddlesome operations to prolong the misery of the hopelessly damaged child; yet, when there is reason for hope of helping a child to be a happy and self-sustaining person, the treatment must be aggressive and persistent. In most instances, it should be given as early as is possible. ★★★

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SIMIAN SEQUELA

Eddie Hilton, the popular standup comedian, says that it's amazing what can be achieved by medicine in this modern age. He contends that monkey glands have made his 95 year old uncle so vigorous that the family can hardly recognize him, but they have also made him sloppy. It seems that the rejuvenated oldster now leaves banana peels everywhere.

Telephone Telemetry

JOSEPH P. MELVIN, M.D.
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As early as the turn of the century, researchers were seeking ways to transmit electrocardiograms over standard telephone systems. In his pioneering work with the string galvanometer, Einthoven found it necessary to install a telephone circuit between the hospital and the physiologic laboratory which housed his nonportable galvanometer. Thus telemetry made possible the first studies of electrocardiograms in persons with heart disease. The author discusses modern usage of telephone telemetry and current equipment.

IN MANY RURAL AREAS there is a lack of professional personnel trained in accurate interpretation of electrocardiograms. One way of filling this diagnostic gap is to transmit electrocardiograms by way of standard telephone wires to a medical center, where they can be analyzed by experienced personnel. Reference to apparatus capable of such transmission first appeared in the modern literature in 1951, when Kanatsoulis published a paper called "Le Tele-electrocardiographe," in the *Presse Medical*.[1] This was soon followed by reports in the American literature from the laboratory of Dr. E. Grey Dimond. His paper, "Transmission of Electrocardiogram over Standard Telephone Lines," was published in the proceedings of the Central Society of Clinical Research, 1952.[2] Also, in the same year, Rahm published in the *Nebraska Medical Journal* an article on "Electrocardiographic Transmission over Standard Telephone Lines."[3] The first detailed electrical circuits were published in the *American Heart Journal* in 1953 by Dr. E. Grey Dimond.[4]

EARLY RESEARCH

Even earlier than the 1950's, however, researchers were beginning to write on the "Telecardiogram." In 1905, Einthoven delivered two papers, one before the General Assembly of the Scientific Society of Holland and the other in a meeting of the Radiologic Society of Medicine and Surgery, which were condensed and published in 1906. His writings gave a general description of a string galvanometer, including details of the coordinates used today in measuring time and voltage and a brief account of the derivation of the standard limb leads. He then described the names of various deflections of the normal electrocardiogram. The need for studying the electrocardiograms of patients with heart disease was recognized, but to do this he had first to overcome a technical problem of obtaining EKG's in in-patients when his nonportable galvanometer was situated some distance from the hospital in the physiologic laboratory. The Leiden telephone system installed a circuit in the hospital, and the first electrocardiogram was sent over the wires of the telephone system nearly 50 years ago. It was by this means that the first studies of electrocardiograms in persons with heart disease were made possible. Using the string galvanometer, with its dependence upon circuits of low resistance, Einthoven recorded his "telecardiogram" under circumstances which today are largely circumvented by the use of other methods of recording.

TWO SYSTEMS

Two methods of electrocardiographic signals are in general use today—the inductance system and the direct line system. In our office, we have used the inductance system for the last two years and have been completely satisfied not only with the portability and simplicity of operation but also the low initial expense of such units. A detailed

Read before the Section on Medicine, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

advertising presentation on similar equipment was published in the July 26, 1958, issue of the *Journal of the American Medical Association.*

These sets consist of a transmitter unit and a receiver unit. Both units are completely transistorized and portable, weighing less than 5 pounds. No special phone connections or installation are required and transmission may be made on any standard telephone line. Both units operate from any standard electrocardiograph. They can also be used to tape record electrocardiograms. The transmitter unit can be attached directly to the patient by standard lead wires and needs only to be placed adjacent to the mouthpiece of any standard telephone. The signal is transmitted into the mouthpiece of the telephone by inductance, and no wire connection is necessary. Routine local or long distance lines carry the signal without special arrangements with the telephone company. At either end of the circuit, transmission of the EKG can be interrupted at any time and additional information supplied by the operator. A multiple lead selector is built into the unit, if specified, and the unit does not need electrical outlets, being powered by pen light and mercury batteries. In addition, using the theory of inductance, heart tones and murmurs can be transmitted over any standard telephone line with excellent quality. At the receiving end, a similar unit slightly modified can take the information from the telephone, again by inductance, and signal any standard EKG machine. The transmitter is essentially a highly sensitive frequency modulator with a rather unique three stage push pull type of transistorized sensitive 60 decibel director and amplifier which is linear from approximately one cycle per second to well above the requirements for the use.

CONVERSION THEORY

At the risk of oversimplification, the theory of the conversion of voltage energy to frequency energy and back again to voltage energy by scrambling and unscrambling line voltages is quite easily perceived by the casual student of electronics. One transmits by frequency modulation, employing oscillators whose frequency vary in direct response to voltage. At the receiving terminal, the frequency modulator voltage is amplified and applied to a discriminator which converts the frequency variations to amplitude variations. The output then will be a voltage identical with that which appeared at the galvanometer terminals of the transmitting EKG machine, and this voltage is applied to a galvanometer at the receiving terminal, the receiving electrocardiogram. The circuits for this transmitter and receiver can be found in the *American Heart Journal* for December, 1953.[4]

DIRECT LINE TRANSMISSION

Direct line transmission of electrocardiograms by telephone has been developed by the Bell Telephone Company, and these consist essentially of data sets which allow EKG's to be transmitted over existing long distance or local telephone facilities. The basic components of the system are the EKG machine and a data set at both receiving and transmitting locations connected by long distance or local telephone call. At the transmitting location, the EKG machine in this operation presents a DC potential to the galvanometer mechanism of the recorder, this potential being brought out on the jack by most EKG manufacturers. The data set is an integrated unit combining a data set and a regular telephone set in one housing. The call is established in the same manner as a normal telephone call; the EKG recorder signal is then applied to the transmitting data set and is converted to a varying frequency or tone in the voice frequency range for transmission over the telephone network. At the distant location, the receiving data set accepts this tone and converts it back to the varying DC potential, this potential then being inserted into the receiving EKG machine. Because this system is also frequency modulated, good linearity of response and a noise advantage is realized. Standardization and lead control of the EKG machine are under the control of the transmitting location and the receiving location is the "slave," so to speak, to the transmitting location. This system incorporates the advantage of predetermined line frequencies with self-standardization, but the slight disadvantage of monthly telephone line charges, in addition to the cost per individual call. The inductance system, after the initial outlay for equipment ($225.00-$275.00), requires only long distance charge per individual call but is subject to the inherent disadvantage of more complicated technique of recording accurately, plus wear and tear on amplification tube equipment.

TELEMETRY / Melvin

The brand telemeter transmitter and receiver system that we use in our office is, of course, the receiver end of a Jordin telemeter system. At the transmitting end, the patient is prepared as usual for an electrocardiogram, and the equipment is allowed to warm up with the sending hospital transmitter operator centering the stylus and standardizing their machine to 10 mm. to 1 mv. After a long distance call is placed, this amount of time allowing the equipment to reach working temperature, the transmitting unit operator places its phone mouthpiece down in the well on the transmitter and turns the volume control as high as comfort will allow, producing a high frequency sound standard or wailing type of sound energy. The receiver unit will have had the receiver or earpiece of the telephone placed in its well. Both transmitter and receiver sets have standardizing rheostats, and this sound standard is transmitted through at a converted voltage of 10 mm. of stylus deflection per 1 mv. of transmitted electrical energy. On the receiver end, the standardizing signal will come through on the equipment as a high frequency AC type of wave, and simultaneous standardization can be reached quite easily. If one does not desire to use the standardizing frequency system, the transmitting EKG may send 5 or 10 complexes in lead 1 and the receiving station, using its standardizing rheostat, can adjust the height of R waves in its receiving lead 1 to the transmitting lead 1 R wave height. The first six leads are transmitted without interruption after standardization is done. After the first six leads are done, conversation for correction or requesting additional leads may be carried out. Following this, the six chest leads may also be done without interruption. In order to test the receiver sensitivity, one may snap the fingers a few times for a short distance above the receiver, watching the stylus response to these sounds.

INVERTED GRAPHS

If an inverted graph is received, the transmitter adapter jack may be wired in reverse on the EKG that has sent the graph. To remedy this situation, the lead selector should be turned on the EKG from 1 to the AVR position to receive a normal graph clinically correct. One other rare cause for inverted graphs is the use of a Beck-Lee EKG machine at the transmitting station. These machines have standardizing pulses in the downward direction, and of course, will result in inverted graphs at the receiving station. A tape recorder input cable in the jack on the rear panel of the receiver will accept receiver signals and feed this into tape recorders. This information may be put on EKG at any time by turning the volume up on the recorder and allowing the receiver to hear the signal from the telephone. To tape the record from the transmitter, the recorder input cable is plugged into the jack on the back of the transmitter at the point marked "tape," and the EKG may be sent at the same time. If the sound signal is disturbing to any people in the immediate vicinity, an accessory transmitter jack is available which couples the transmitter to the telephone inductantly without the sound being appreciated at all.

IMPORTANT POINTS

The following points should be carefully observed:

1. Both the transmitter and receiver units should be warmed up adequately.
2. The patient should be prepared quite well and should be relaxed and comfortable, if this is possible.
3. Standardization, either with the standardization frequency wave or with the adjustment of the R wave in lead 1 height method, should be carried out accurately at the beginning of the electrocardiogram. Once this is done, no further standardization will be needed.
4. The mouthpiece of the telephone at the transmitter end should be positioned into the well and the earpiece of the telephone at the receiving station should also be positioned firmly and evenly into the well of the receiver.
5. Extraneous noise should be avoided during the sending of the electrocardiogram. If oral communication is necessary between the transmitter and receiver stations, erratic behaviour in the stylus at the receiving end can easily be produced. The EKG should be discontinued and conversation carried out. ★★★

838 Lakeland Dr.

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Advances in Testing Hearing—Real or Fancied?

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As in all fields of medicine, a number of discoveries have been made in otology during the last few years. The author discusses a number of the innovations in testing hearing considering whether each represents a real advance or merely a current fad. He opens with a discussion of mechanical equipment and closes with a description of modern tests for hearing loss.

THE COURSE OF MEDICAL advancement is beset with stumbling blocks and slippery pebbles. Even worse are the attractive blind pathways that lead aside into cul-de-sacs. These require that researchers retrace the steps to the main highway and painfully report the nonsensical fads that were the only rewards found in the cul-de-sacs before sane progress can be resumed.

Before discussing some of the slippery pebbles and cul-de-sacs and the woeful lack of knowledge concerning even the simplest processes involved in hearing, let us consider the mechanical equipment used in testing hearing.

EQUIPMENT

In hearing, the great raison d'être is hearing and understanding of the word. All else is commentary. How well does the patient communicate? This is the principal concern. But there are important commentaries demanding our attention.

Deafness, so far as not understanding speech extends, does not threaten life directly. Brain tumors or certain vascular diseases or toxic disturbances that may be detected by proper hearing evaluation do threaten life and so their detection is of even greater importance than clarification of speech. Of course, then, we must provide ourselves with the best equipment possible and learn to use it correctly.

The room or suite in which the tests are carried out should be constructed properly. A minimum provision would be two compartments separated by a partition containing a glass window. Each compartment should be well and competently sound treated. Our suite was constructed as the office space was constructed, and so it is an integral part of the building. But this type of construction is no longer necessary. Prefabricated testing chambers that are highly satisfactory are available at a fraction of our cost. And they may be moved should the physician change his location or alter his existing space. But the physician must not delude himself into thinking that a space 4 feet x 4 feet set apart by curtains in a corner of the treatment office (especially if it encompasses a window looking out on a noisy street) will be anything but a source of error, trouble, and embarrassment.

TUNING FORKS

We still use tuning forks and we know how to use them—and so should you. The usual set of forks ranging from 128 cps to 4,096 cps should be supplemented by a 64 cps fork and a 26 cps fork for determining the low threshold and by an 8,000 cps bar and a Galton whistle or a Struyken monochord for determining the upper threshold. These latter instruments for the ultra high frequencies are of value in unusual cases where the

Read before the Section on Eye, Ear, Nose and Throat, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

recognition of very early changes may resolve a diagnosis.

The theoretical use of these instruments is taught in postgraduate or early resident training. But how many physicians remember what is meant by a positive or a negative Weber, Rinne, Schwabach, Gellé, or Lewis test? We find it much simpler to express findings in unmistakable terms by stating that the Weber is referred to the Right or the Left; AC>BC = N (air conduction is greater than bone conduction which is normal); or AC<BC>N (air conduction is less than bone conduction which *appears* greater than normal); or AC = BC<N (air conduction equals bone conduction which is less than normal). At one glance this gives more information about these tests than all the positives and negatives ever could express. Evidence is developing that the lower frequencies will reveal an AC:BC gap long before the middle ones do. This will bear keeping in mind especially when the audiometer is considered. The Gellé test is stated as either F (for fixed) or M (for movable).

GELLÉ TEST

The usual manner of carrying out the Gellé test is quite complicated. We have used a method for some years that has been quite revealing to us. If evidence of conductive deafness is present, the forefinger of the examiner's hand is used to fold back the tragus to occlude the external canal. Then the stem of a vibrating 256 cps or 512 cps fork is placed against the nail of the examiner's forefinger, and the patient is asked if he hears it. Then with increasing pressure of the stem of the fork against the examiner's finger nail the air trapped in the external canal is compressed more and more, and the patient is asked to report what happens to the sound. If it diminishes markedly, the stapes is freely movable; if it diminishes only slightly or remains the same, the fixation is subtotal; if the sound becomes louder, the fixation is complete.

LEWIS TEST

The Lewis test is stated as T>M or T<M or T = M where T is tragus and M is mastoid. This test is excellent for confirmation of the findings of the Gellé test. The stem of a vibrating 256 cps or 512 cps fork is placed successively against the tragus and the mastoid and the patient is asked if they are of equal loudness or, if not, which is the louder. If heard louder via the mastoid, fixation deafness (otosclerotic) is suggested most strongly. If heard louder via the tragus, catarrhal or adhesive or other simple middle ear deafness is suggested.

AUDIOMETER

And now let us turn to the audiometer wherewith controlled frequencies under controlled recordable intensities may be applied repeatedly at one sitting or on successive sittings.

The minimum requirements for such an audiometer are (1) accurate calibration both as to pitch and intensity, (2) a frequency range from 125 cps to 8,000 cps (This is the range supplied in today's better commercial audiometers, but we feel that this range is inadequate and this inadequacy will be discussed later), (3) two channels whereby loudness balance tests may be carried out, (4) an adequate masking circuit, most preferably of the white noise type, (5) circuits by which the Difference Limen and the SISI (short increment sensitivity index) of each ear may be determined in cases in which a loudness balance cannot be carried out completely, (6) a circuit for speech tests by the spoken voice of the examiner. If possible, the audiometer should have an auxiliary circuit for the standardized taped or recorded speech tests and an outlet for free field testing.

Certain pitfalls must be pointed out in the basic technique of the threshold tests with the audiometer. The first of these is the lack of masking. In the use of masking, the first consideration is what type masking agent is to be used? There are still those who for some reason favor the old Politzer noise apparatus. This apparatus with its mechanical ratchet mechanism for producing the noise and the hard rubber tip used for assuring a tight seating of the apparatus into the external auditory canal of the ear not being tested sets up skull vibrations which mask the tested ear to a not inconsiderable extent. This is doubly true if bone conduction is being tested. To a much less degree, audiometrically produced saw-toothed masking noise delivered through a cushioned air receiver has the same effect although there are cases in which saw-toothed noise may be preferable.

By far, the best masking sound is the so-called white noise. *White noise* is a term borrowed from optics. As white light is composed of all of the colors of the spectrum, white noise is composed theoretically of a mixture of all audible frequencies. It has a not unpleasant "whooshing" or rushing sound resembling a current of air. If in an emergency the white noise masking circuit fails,

fairly satisfactory white noise masking may be obtained by sending the compressed air from the spray compressor into the ear canal, provided its temperature does not cause dizziness. With white noise, the examiner can be relatively certain that only the masked ear is being masked.

Masking is not always required to assure accurate pure tone audiometry. So long as the threshold air conduction curves of the two ears lie fairly close to each other it is not needed. But when they lie as much as 25 db apart, and especially if they parallel each other, the examiner must be suspicious of a shadow curve in the poorer ear from around-the-head conduction to the better ear. If there is sufficient discrepancy between the two ears by air conduction, masking should be used when obtaining the bone conduction threshold in each ear.

CASE 1

In Case 1 (Mr. P. G., Figure 1), there had been a sudden drop of hearing with onset of tinnitus in the left ear a few weeks previously. An audiogram without masking was diagnostic of left conductive deafness. Catheterization revealed a patent tube and produced no improvement. The

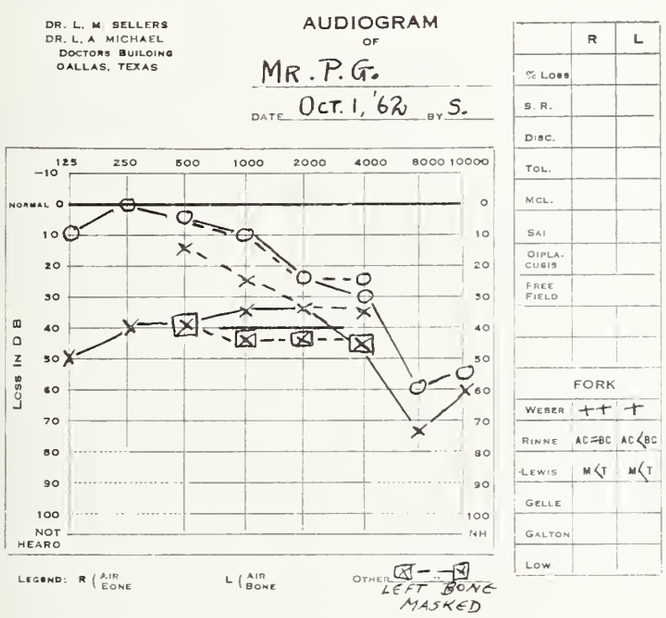

Figure 1. (Case 1.) Note the shift downward of the bone conduction curve of the left ear after the right ear was masked changing the diagnosis completely.

audiogram when repeated with masking of the right ear for bone conduction changed the picture to one of sensori-neural damage with low tone loss. Vasodilators produced marked relief (Figure

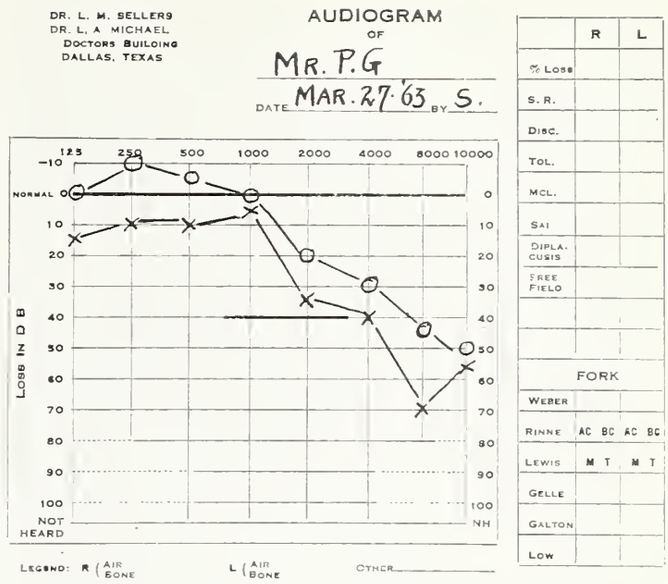

Figure 2. (Case 1.) Improvement in the air conduction curve of the left ear is shown after correct treatment directed to the left cochlear mechanism.

2). Note the uptilt from 8,000 cps to 10,000 cps which will be referred to later.

CASE 2

In Case 2 (Mr. N. B. C., Figures 3 and 4), the initial audiogram was obtained with masking. Subsequent audiograms were obtained without masking. On August 24, 1962, he complained of increased deafness in the right ear. We were oblivious to the shadow type curve. When at the next visit he complained of further hearing loss in the right ear, we finally awakened and masking

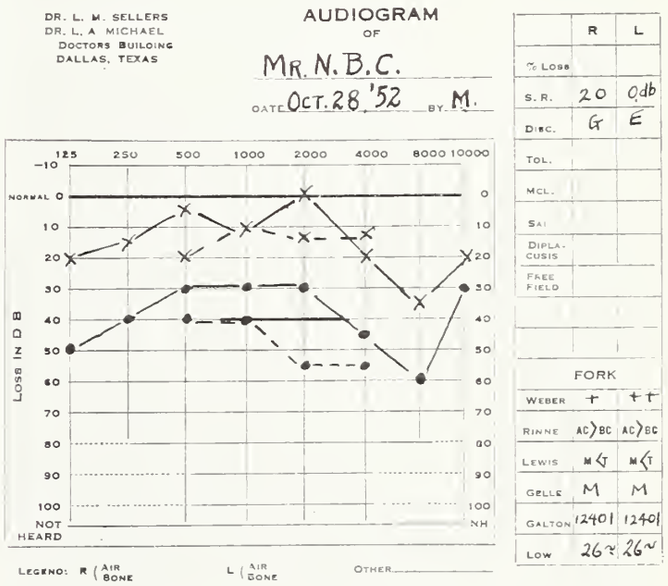

Figure 3. (Case 2.) Note the correct curves with the left ear masked for the right bone conduction and air conduction tests.

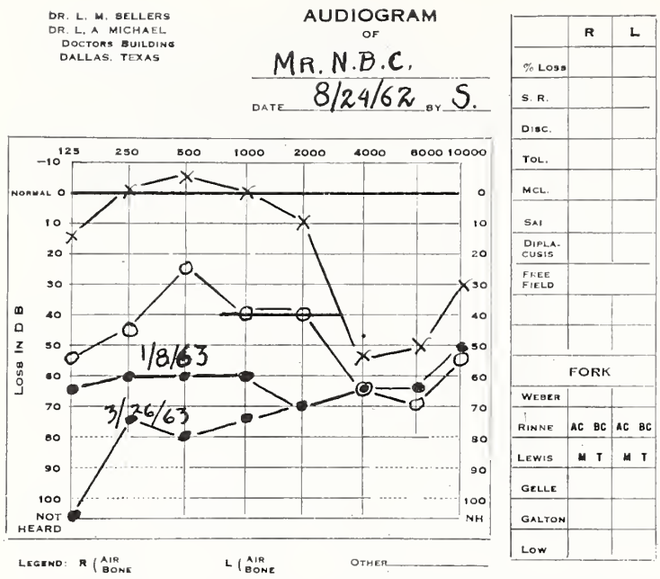

Figure 4. (Case 2.) Masking the left ear corrected the amount and type of drop of the right air conduction curve.

showed the curve found in the right ear to be indicative of shocking sensori-neural damage.

CASE 3

In Case 3 (Miss R. O., Figure 5), the school nurse called the office on April 16, 1963, to inquire if anything further should be done as the child after nearly two years now flatly refused to use her hearing aid in her right ear any longer as she said it was doing her no good. We consulted the original audiogram and told the nurse that

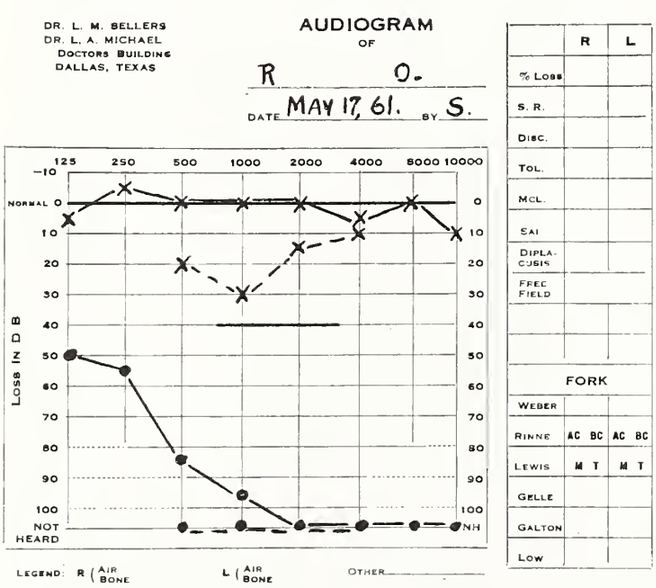

Figure 5. (Case 3.) Failure to mask the good ear led the hearing aid salesman to try to improve hearing in an ear without hearing.

no aid had ever been advised as the left ear was normal and the right ear was totally deaf for bone conduction and subtotally deaf for air conduction. The hearing aid peddler who profited to the extent of some four hundred dollars had failed to mask the left ear having come to the patient's home to test the hearing in a noisy environment.

AUDIOMETER FREQUENCIES

Earlier, I referred to the upper limit of 8,000 cps built into the newer audiometers no matter what the cost. We have just placed in use in our office a new audiometer replacing a slightly older one as it contains certain necessary advanced features. Although the cost of this audiometer is over $1,800, the upper limit is 8,000 cps. We have another audiometer that is quite old and that is costly to keep in calibration and repair, but it is the only one obtainable that has 10,000 cps as its upper limit and is completely double channelled so that loudness balance may be tested throughout the range from 125 cps to 10,000 cps.

The reason for cutting off at 8,000 cps is given as an effort to maintain accuracy as at 10,000 cps the Doppler effect may give a lower threshold and therefore may indicate the ear as being 5 to 30 db more sensitive than it actually is. But let us con-

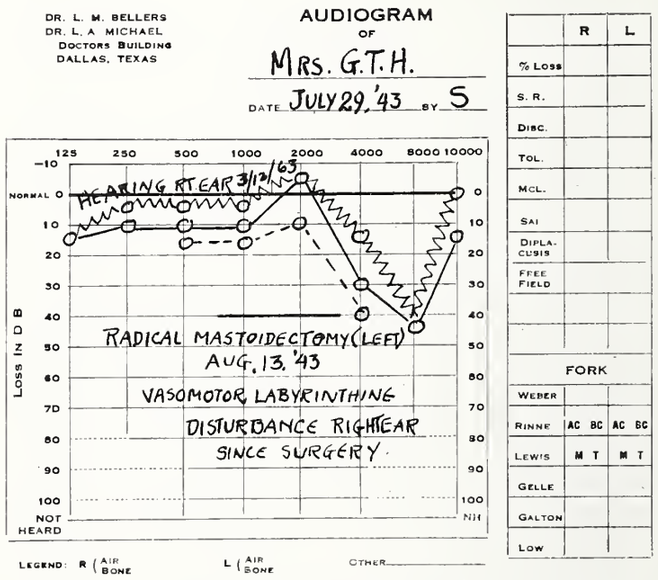

Figure 6. (Case 4.) A marked uptilt is shown between 8,000 cps and 10,000 cps with a good prognosis fulfilled.

sider three audiograms. In Case 4 (Mrs. G. T. H., Figure 6), there is a marked uptilt at 10,000 cps, definitely greater than possibly could result from the Doppler effect. This is present also in Case 5 (Mrs. C. C. J., Figure 7), but to a lesser degree.

Cases of this type represent a nicking of the threshold and not a total loss of response of the organ of Corti in the lower turns of the cochlea. It is shameful to allow a small additional manufacturing cost to interfere in the utility of so costly an instrument.

Although we cannot speak with definite assurance now, we do feel that we have in our files evidence that when the uptilt at 10,000 cps is present the prognosis for arrest or improvement is more favorable as indicated by Cases 4, 5, and 6

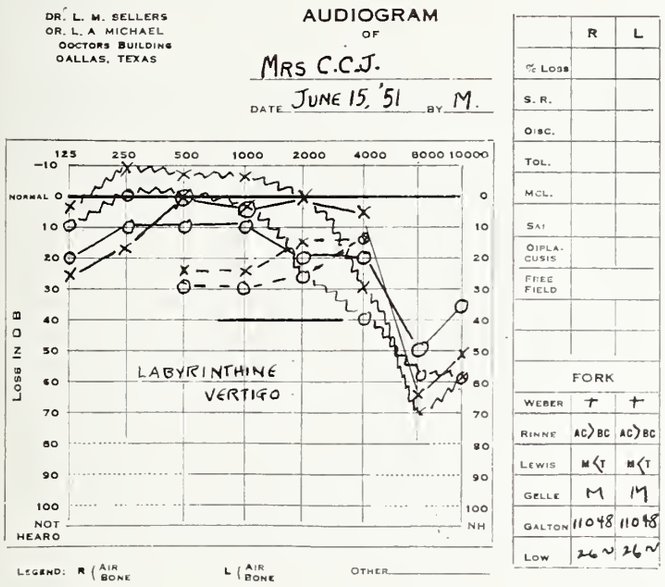

Figure 7. (Case 5.) This audiogram has the same significance as Figure 6 but with less definite promise and result.

(Figures 6, 7, and 8). A statistical survey of our records for the past 12 years is on the work table now.

Admittedly, the significance of these differences is not yet established. But the differences are there, and scientific clinicians are entitled to know them especially when they are paying an excessive price for the privilege. And even worse is threatening. The low frequency of 125 cps is now under fire (in spite of the recent recognition of its importance), and it may be expected to be dropped from audiometers. It is time that this tragic nonsense came to an end.

The only threshold test now available for cochlear response is the bone conduction curve, and it is admittedly inaccurate. In each individual's bony skull there is a built-in impedance to sound conduction. In each individual this impedance varies from other individuals. Thus, in testing the bone conduction, the clinician is testing a conductive mechanism of unknown impedance. This variance usually is not great, but in any given individual it is not known whether it is great or little.

The SAL (sensori-neural acoustic level) test is of some significance in this matter. In this test the air conduction thresholds are first obtained and recorded. A white noise bc masker set at a constant intensity of 2 volts or 100 db then is placed on the mid-line of the forehead. While the masking sound is continued, an air conduction threshold curve from each ear is taken a second time. Under normal conditions this should show a curve 50 db below the threshold without masking. If the curve is less than a 50 db shift, it indicates bone conduction loss. Thus the normal 50 db shift less the shift found (e.g. 20 db) equals the bone conduction or sensori-neural deficit (in this case a 30 db loss). We thus test the capacity of the bone to conduct a masking noise of known intensity. This does help in by-passing the in-built impedance. A paper has been read and soon will be published by Dr. L. A. Michael of Dallas covering this in greater detail.

But there is another and simpler test to obviate the unknown impedance factor. This test was

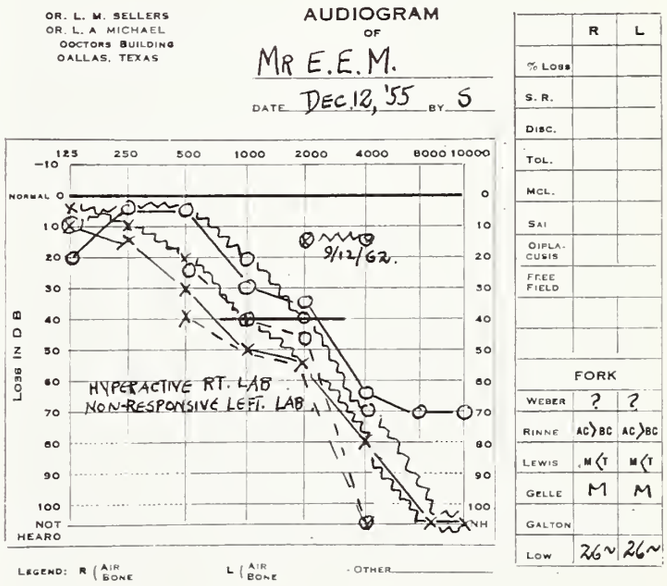

Figure 8. (Case 6.) There is no uptilt between 8,000 cps and 10,000 cps. Again the prognosis was fulfilled, but this time a bad one. There has been no improvement of hearing, and there is a lessened but definite persistence of the vertigo, both episodic and continual imbalance in spite of treatment.

shown to me some years ago by Dr. Herman Semenov of Beverly Hills, Calif. I am sure that it is original with him. It requires only that the examiner have approximately normal hearing by air conduction. If he does not, an office associate may assist in this step. If the usual air conduction and bone conduction tests have been run and a bone conduction deficit noted but the patient's skull impedance factor is in doubt, the bc button

may be placed over the patient's mastoid as usual. Then an air-tight connection should be established between the examiner's auricle and the patient's auricle on the side opposite to that being tested, with the external canals opposing each other. The patient should be instructed to signal the moment he hears the testing tone. Then the intensity of the tone is increased until he gives the signal that he hears it. If the examiner hears it at the same instant, the patient has no sensori-neural loss even if the previously determined test showed a deficit. The deficit was due to the patient's impedance factor. On the other hand, if the examiner hears the tone before the patient signals its reception, the patient's bone conduction deficit indicates a sensori-neural hearing loss as his skull was conducting the tone to the hearing mechanism without loss by impedance. This is a simple test. It is accurate and the amazing fact is that is seems to be totally unrecognized.

For additional evaluation of the cochlea, the above threshold tests must be utilized. These are the speech reception tests, the discrimination tests, the loudness balance test for determination of recruitment if one ear is more involved than the other, the difference limen determination, the Bekesy test, the SISI, and the old reliables for the determination of malingering such as the Stenger and Lombard tests.

SPEECH RECEPTION TESTS

The speech reception tests may be carried out with the examiner's voice or with the use of standardized phonograph records or tapes. If the live voice method is used, the examiner's voice must be monitored constantly for maintenance of constant intensity or volume, and the examiner should be in the compartment isolated from the patient as many patients may hear the examiner's voice leaking around the ear phones if their hearing is fairly good. By using sentences, the threshold of hearing for speech is established. The Harvard list of spondee two syllable words is then read with a pause after each word for the patient to repeat it. The percentage of these words heard correctly gives the figure for expressing discrimination for speech. Loss of discrimination is almost pathognomonic of sensori-neural hearing loss. We prefer to use the live voice as the patient is more at ease than in the presence of a cold mechanical testing device. The hard of hearing as a class are highly sensitive to environmental factors.

Free field testing was mentioned in the discussion of the requirements of the audiometer. As opposed to closed testing with head phones, free field testing means that the patient sits in his compartment without head phone and the words are delivered to him by a high fidelity speaker. By using an amplifier in the circuit after it leaves the audiometer, the sound is built up prior to its being used on the first case so that it is heard within the testing compartment at a level as nearly identical as possible with the level delivered via the head phones with the audiometer set at 0 db to 5 db. That is, it is just audible at an intensity of 0 db to 5 db. The amplifier is then locked at this adjustment and never disturbed unless for repair. The amplitude is varied by the control on the audiometer as though the head phones were being used.

FREE FIELD TESTING

Free field testing has its advantages. First, of course, it simulates the conditions in which the patient has his ordinary hearing experiences without the use of any device in the ear. This removes much strain and self-consciousness. The disadvantage, if any, is that the ears cannot be tested individually. But here this is not a consideration. It forms an excellent environment for testing the efficacy of hearing aids that have been fitted after the hearing has been tested. In children it is of great advantage. The child may be set playing at a table with toys. Conversation or simply calling his name will yield a surprising degree of evaluation if the intensity of the field is varied while testing. If two or more separate speakers are installed in the compartment, further knowledge of the child's hearing response is obtained by noting whether or not he turns toward the speaker from which the voice comes. The value of free field testing grows with its use.

LOUDNESS BALANCE TEST

The loudness balance test evaluates recruitment of sound, a phenomenon familiar to all who are associated with anyone having presbycusis or senile deafness. If you speak to such individuals in a normal voice, they do not hear or understand and will ask you to "speak up." If you moderately increase the intensity of your voice, they may ask you to repeat again. Then, if you raise your voice markedly, they will place their hands over their ears to indicate discomfort and will say, "Don't yell at me like that—I'm not that deaf." This means that once you cross their S.R. threshold they quickly regain their acuity and hear with normal loudness.

To determine this audiometrically when one ear is more involved to the extent of 25 db or more, a laddergraph is plotted. On this graph are placed the thresholds of the two ears which should be heard with equal loudness. These points are connected with a slanting line. The intensity of the sound is now increased to the better ear by 20 db and the patient is asked to indicate in which ear the sound is louder. He will indicate the better ear. When he is asked to indicate when the sound becomes equal in both ears the intensity to the worse ear is advanced by 5 db steps with pauses between each advance. If the patient does not signal equal loudness until the sound is increased by 20 db in the poorer ear, no recruitment is present although it may be well to confirm this by advancing the better ear another 20 db and repeating the steps with the poorer ear. If equal loudness is not reached until each ear has been advanced by 40 db, it is certain that no recruitment exists (Figure 9A).

If, however, the patient indicates equal loudness when the tone in the poorer ear has been advanced only 5 or 10 db these two points are plotted on the ladder-gram and connected with a line which will slant much less. Another one or two advancements and the connecting line will be horizontal showing how rapidly the poorer hearing ear "recruited" or gained in its ability to hear as well as the better ear (Figure 9B).

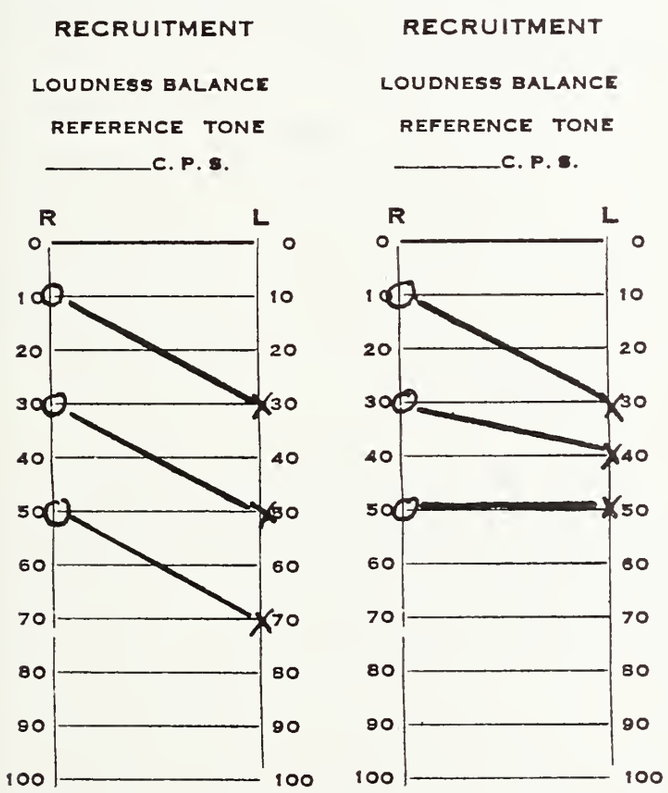

Figure 9. (A) A ladder-gram typical of absence of recruitment. (B) A ladder-gram typical of recruitment.

The presence of recruitment of loudness indicates a sensori-neural hearing loss. Its absence indicates a defect in the conducting mechanism.

If both ears show an equal or nearly equal hearing loss, the loudness balance test cannot be used. And so we must measure the ability of each ear to detect changes of intensity. For this we turn to the Difference Limen test. To perform this test the audiometer must have a circuit that superimposes a pulse tone on a constant tone being tested at 10 db above threshold. Then the intensity of the pulsing tone is increased until the patient just hears the pulsing. This reading is recorded. Then the constant tone is increased to 40 db above threshold. Again, the pulsing tone is advanced until the patient hears it, and these findings are recorded.

All patients are able to detect the increase of the pulsing tone at 40 db above threshold with less increase than at only 10 db above threshold. The value of the pulsing tone at 40 db subtracted from the value at 10 db gives the difference limen. In the normal or nonrecruiting ear this should be about 1 db. Because the recruiting ear is able to pick up smaller increments of increase, it is able to pick up the pulsing tone with less increase near threshold than the nonrecruiting ear. This will reduce the value of the difference limen. If it is in the neighborhood of 0.4 db or less, the ear is recruiting.

The Bekesy test makes this evaluation with an automatically shifting pitch and intensity on an extremely expensive apparatus. The cost makes it impractical for the otologist in private practice.

The SISI (short increment sensitivity index) test takes the percentage of pulsations produced manually by the examiner at 1 db above a constant tone at 20 db above threshold that are detected by the patient. Twenty pulsations are usually produced and 5 per cent allowed for each one heard. The recruiting ear will hear a higher percentage of pulsations. But the normal percentage has not yet been established officially. Thus it can only be said that if a high percentage is detected, recruitment may be assumed; if a low percentage, nonrecruitment may be assumed.

In the case of malingerers, unilateral deafness is usually feigned because bilateral deafness is too difficult to feign without dropping one's guard. Unilateral feigned deafness is quite easily detected by a battery of tests. The Stenger test is the simplest of these. It is based on the fact that when an identical tone is introduced into both normal ears at different intensities it will be heard *only* in the ear receiving the greater intensity. First, the threshold for this tone in the good ear is determined

and then the tone is presented at 10 db above threshold. Then the patient is asked to indicate when he no longer hears this tone. With the tone sounding in the good ear, the same tone is introduced into the affected ear and increased gradually until it is at least 50 db above that sounding in the good ear. If the patient continues to hear the tone in the good ear, it may be assumed that the other ear actually is deafened. If shortly after the intensity of tone introduced into the affected ear passes the intensity sounded in the good ear, the patient indicates he no longer hears it in the good ear, i.e. that he no longer hears any sound, the so-called affected ear is not affected and is masking the sound in the good ear.

The Doerfler-Stewart test is quite complicated but may have to be used if the Stenger test fails. Reference to the use manual of any audiometer capable of performing it will be necessary.

The Lombard reading test is easily performed and is excellent for either feigned monaural or binaural deafness. The ear phones are placed over the patient's ears and he is asked to read any simple selection continuing in the same tone of voice. The masking noise is introduced into both ears and increased to high intensity. If hearing is present in either ear, the voice will rise in both pitch and intensity as the reading continues and as the masking noise increases. It is almost impossible for a hearing patient to master the means of defeating this test. Then repeat the test, administering the noise to the good ear only. If the opposite ear is not hearing, his voice will rise exactly as it did when both ears were masked as he does not hear his own voice.

Finally, it must be emphasized that all tests must be made by the otologist. No matter how well trained a technician may be, he or she stands between the physician and his patient during the most crucial stage of their relationship. The technician, and not the physician, sees the ease or the difficulty with which the patient makes his decision as to whether or not he hears a particular tone at a given intensity; just when the balance point is reached in a loudness balance test; how much hesitation there is when the patient is to decide whether the word he hears is "inkwell" or "eat well"; what his attitude is during a test for malingering or the detection of psychic deafness. A cold piece of white paper on which an audiogram is plotted cannot do this, neither can a technician describe it. The physician must see it all and evaluate it all. The passing of the testing responsibility to someone other than the otologist is perhaps the greatest single source of diagnostic error.

SUMMARY

The drifts and tendencies (both worthy and unworthy) in the use of hearing tests have been evaluated in an effort to keep otology on the high road of true progress in diagnosis, prognosis, and clinical practices. It is hoped that such evaluation will lead to greater success and honesty in treating patients with a loss of hearing. ★★★

3707 Gaston Ave.

ANCIENT PRACTICES

Early works of Costa cited by Thorndike in his "History of Magic and Experimental Science" indicate "that a woman who spits thrice in a frog's mouth will not conceive for a year."

This startling directive Costa attributes to earlier medical authorities and adds that he himself has not verified its efficacy but would not deny it, either, since nature has her own inscrutable ways of doing things.

Clinicopathological Conference L

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

Dr. Robert Thompson: "The protocol as given to me is as follows: This was the first University Hospital admission of this 63-year-old Negro man who evidently was well until about March 9, 1963 (two weeks before admission) when he had the 'flu' characterized by chills, fever, cough productive of white sputum, and myalgia. Over the next few days his condition became worse, and he saw his local physician because of increasing weakness and fever. He was hospitalized and treated with chloramphenicol, kanamycin, tetracycline, erythromycin, and Co-Hydeltra in addition to some other drugs. His CBC on March 19 revealed a white count of 1,350 with 98 per cent lymphocytes and 2 per cent monocytes. He was given two units of blood and referred to the University Hospital.

"On admission on March 23, the patient was lethargic and acutely ill with a blood pressure of 150/90, pulse 128, and temperature 98°. His lungs contained numerous inspiratory rales most marked at the left base. He had a gallop rhythm but no murmurs. A few 'shotty' epitrochlear and axillary nodes were found, but there was no other adenopathy. The liver and spleen were not palpable, and there were no neurological abnormalities except for lethargy and disorientation.

LABORATORY DATA

"Pertinent laboratory data included a WBC of 900, all lymphocytes; a hemaglobin of 11.5 gm. per cent; a platelet count of 356,000 with giant platelets noted on the smear. It is said a bone marrow was done, but on looking for it I could not find the marrow or any report of the marrow. The protocol states that the bone marrow showed a block at the myelocyte level with an increase in blastocytes and promyelocytes; platelets were increased with adequate megakaryocytes. In general, it was felt that the marrow represented myeloid hypoplasia with relative lymphocytosis and that the changes were compatible with marrow suppression secondary to drugs.

"Cultures of both blood and urine grew out *Klebsiella-Aerobacter* sensitive only to Polymyxin B and Coly-Mycin. His admission chest x-ray film revealed pneumonitis primarily of the left lung. May we see his x-rays at this time?"

CPC L involves a 63-year-old Negro man who was well until about two weeks before admission when he had the "flu" characterized by chills, fever, cough productive of white sputum and myalgia. He was seen at another hospital, treated with antibiotics and given two units of blood. On admission to the University Hospital, the patient was lethargic and acutely ill. His complete blood count showed a white count of 900, all lymphocytes; a hemoglobin of 11.5 gm. per cent, and a platelet count of 356,000 with giant platelets noted on the smear. The bone marrow showed a block at the myelocyte level with an increase in blastocytes and promyelocytes. The platelets were increased with adequate megakaryocytes. The patient expired on the second day of admission after treatment with antibiotics, digitalis, and vasopressors.

Discussers are Drs. Robert Thompson, Jack K. Goodrich, Herbert G. Langford, Fred Allison, and Joel G. Brunson.

X-RAY REPORT

Dr. Jack K. Goodrich: "There are two definable areas of infiltrative change in the left lower lung field. These appear to become confluent laterally. There is some apparent infiltration behind the

cardiac margin—as evidence of this is double density visible through the cardiac silhouette. Still another area of infiltration is seen in the apex of the right lung. On projection, this infiltration has some characteristics of a cavity formation. This is more apparent in the enlarged projected view than it was on the film seen at the view box, however, and I question this at this point. From a radiographic standpoint, this simply represents pneumonitis largely involving the left lower two-thirds of the lung field and has no particularly characteristic radiographic appearance."

PERTINENT FINDINGS

Dr. Thompson: "I must say I was hoping you would prove to be of more help.

"Throughout his hospital course he was febrile (100-104°) and moribund. Finally he went into shock and expired the second day of admission. Therapy had consisted of Staphcillin, digitalization, Streptomycin, tetracycline, Coly-Mycin, and, finally, vasopressors.

"We are thus left with a few pertinent findings. First of all, this was a middle-aged male who had a history of some two weeks' duration, perhaps longer, during which time he must have been anemic as he was given two pints of blood. The admitting hemoglobin of 11.5 would suggest that the two pints of blood raised his hemoglobin some 4 gm. per cent so probably his initial hemoglobin was in the range of 7 gm. per cent. The productive cough of white sputum is significant in that one can rule out acute inflammatory disease in the lungs, possibly an acute lobar pneumonia. There is no mention of any foul smells so the possibility of an abscess or bronchiectasis can be ruled out. However, a white sputum does suggest such things as TB and various fungal infections.

"The second pertinent finding is neutropenia, with a normal or slightly elevated platelet count. This would tend to rule out any evidence of drug intoxication which would lead to a suppression of not only platelets but the other cell elements as well. An overwhelming infection or toxemia must be considered first of all as a possible cause of neutropenia in this patient. One can think of several pertinent infections, particularly the chronic granulomatous group, TB, moniliasis, cryptococcosis, or mucormycosis. This might be even further substantiated by the fact that he had been on antibiotics for some time, and it is well known that these organisms flourish on antibiotics. There are several causes of neutropenia which we can dispense with. Hypersplenism can be ruled out as there was no evidence of an enlarged spleen and the platelet count was within normal limits. The possibility of other anemias should be considered but can more or less be placed in the refuge group. We do know he was anemic, but we can probably attribute this to a block in the erythroid maturation. Such factors as collagen disease can be considered, and we are slightly inclined to think of this when myalgia is present, but there is nothing else pertinent in the data to suggest this.

"As a result of the sequence of neutropenia, we come back again to this white productive sputum. We are not told whether it is thick, tenacious, or mucoid and the thoughts here would be that this individual has a chronic granulomatous inflammation, probably an overwhelming TB infection. The second possibility would be secondary infection of cryptococcosis. Finally, although there is no evidence of heart murmurs, one wonders if the possibility of a bacterial endocarditis with overwhelming septicemia can be considered on the basis of the gallop rhythm and the positive blood culture for *Klebsiella.*

"So the three points are: (1) chronic granulomatous inflammation, most probably TB, (2) bacterial endocarditis, *Klebsiella* in origin, and (3) a secondary contaminant superimposed on all this, probably cryptococcus."

DRUG REACTION

Dr. Herbert G. Langford: "You were saying that you ruled out a drug reaction because the platelets were intact."

Dr. Thompson: "Yes, if the drug is the toxic agent then the first thing that is attacked is the platelets. You usually either see megakaryocytes which are not producing platelets or the megakaryocytes are decreased and the platelet count is decreased. Here was an individual who over his few weeks had a progressive neutropenia from 1,800 to 900, yet his platelets remained more than adequate. However, during this time he was on a progressive downhill course."

Dr. Langford: "Now for granulomatous disease, you are postulating that this was due to a toxic action not to bone marrow saturation because if you are going to do the direct bone marrow, you get into the same pertinent process."

Dr. Thompson: "I should have brought out that we have one marrow sampling. This may or may not be representative of the entire marrow per se. I think rather than a direct toxic process probably there will be proven to be marrow infiltrates of this granulomatous inflammation."

Dr. Langford: "How is this hitting the white cells and skipping the platelets?"

Dr. Thompson: "I see Dr. Fred Allison is here, and maybe I can get some support. I think with chronic granulomatous inflammations there tends to be a selective suppression because of chematoxic properties to suppress the neutropenic and granulocytic series initially."

Dr. Langford: "Can it suppress the granulocytes completely?"

Dr. Thompson: "If it is overwhelming. There is some basis for the charge on the organism and the charge on the polymorphonuclear cell."

Dr. Fred Allison, Jr.: "I came in late, and I'm not sure just what the question is."

Dr. Langford: "The question is whether an overwhelming granulomatous disease will produce complete disappearance of polys and leave the platelets intact. First, does it happen, and second, if it happens, how does it happen.

Dr. Allison: "I never have seen this happen. It is known that a profound leukopenia may be found with miliary granulomatous disease. I don't know the mechanism, although it has been postulated that a myelothesic process may be responsible but whether or not this is really so, I do not know. Some patients have a big spleen, and it has been suggested that hypersplenism, whatever that is, may be responsible. I have never seen a complete absence of granulocytes with a granulomatous process."

Dr. Thompson: "This is definitely unusual, but I think this can occur based on the properties of the organism and of the polymorphonuclear leukocytes themselves. This case being presented, I gather, is a rare bird. I have seen this happen down to the range of 2000, but never this low. However, I still postulate that this is what happened."

Dr. Allison: "I am not familiar with hematological problems in this area, but I would guess that instances of granulocytopenia due to drugs could occur without thrombocytopenia."

Dr. Goodrich: "Do you attach any significance to the giant platelets that were reported on the smear? I take it that this was a peripheral smear."

Dr. Thompson: "No, I don't attach any significance to this. It just indicates that the marrow was producing adequate platelets."

PATHOLOGIST'S REPORT

Dr. Joel G. Brunson: "I will review briefly the gross findings in this case. It is almost like the clinical history in that it really doesn't make much sense. There were 200 cc. of bile-stained clear fluid in the peritoneal cavity, and although this patient was obviously jaundiced at the time of postmortem examination, no reference to that was made in the clinical history.

"In the right pleural cavity there were about 500 cc. of a serosanguineous fluid and in the left pleural cavity about 750 cc. of a similar type fluid. The lungs were heavy, weighing over 600 gm. each. There was thick mucus in the bronchial tree. This was fairly clear, and, I suppose, gave rise to the description of white sputum. Most of the left lower lobe appeared to be infarcted. There were numerous small infarcts, which were confluent, involving most of that portion of the lobe and also sections of the right lung. Many small vessels, occluded either by thrombi or emboli, were present in both branches of the pulmonary vessels, and in addition to that, there was an obvious pneumonia. The examination of the heart was essentially negative, there being no intrinsic lesions worthy of note.

"In the examination of the gastrointestinal tract, beginning in the midportion of the esophagus, there were areas of rather extensive hemorrhage and ulceration with loss of mucosal pattern. Also, in the cardia of the stomach there was an area 3 by 5 cm. which appeared to be an infarct. The liver was rather remarkably enlarged. It weighed 2,870 gm., and it was estimated that about 60 per cent of the liver was involved by multiple areas of infarction. Many branches of the hepatic vein showed partial to complete thrombotic occlusion, and the portal vein also appeared to be partially occluded by a thrombotic mass. The kidneys were swollen; they showed evidence of chronic pyelonephritis and rather ill-defined hemorrhagic areas thought to represent early infarcts. The spleen was not enlarged. It weighed 100 gm. but did show scattered hemorrhagic areas which were felt to represent early infarcts.

"Now, I cannot explain why this patient did not have neurologic abnormalities. The brain, on the inferior surface of the left frontal lobe, was quite soft and was reddish tan. Also in the right parietal occipital lobe, there was a fairly large area which was soft and hemorrhagic. The cerebrospinal fluid was grossly bloody at the time of postmortem examination. All of this adds up to a rather disarming array of vascular occlusion, with multiple areas of infarction involving multiple organs. It was not until we looked at the microscopic sections that it became reasonably clear as to what happened to this patient.

"The brain demonstrated areas of hemorrhage and infarction, as I have already mentioned. In almost all of the sections from this patient there

existed two or three agents which may do this of themselves. Sections of the brain, for example, showed flat fungus forms. This is a classic form of *Mucor,* a nonseptate branching fungus which more often is seen in diabetic patients. We do not have any evidence that this patient was diabetic, but we do know that this patient had a debilitating disease. The characteristic tendency of this organism is to invade vessel wells, producing thrombosis and infarction wherever it happens to occur. Some of these forms may be seen lying within the arterial media.

"In addition to this, there is good clinical evidence that this patient had a septicemia. There is also evidence morphologically that there must have been tremendous numbers of bacteria circulating in this patient's blood stream, in that myriads of organisms are present in some sections. I suppose that some of this could have occurred post mortem, but the patient was examined about two hours after death, so I feel reasonably certain that some of this was growing while he was alive. There is also a paucity of any inflammatory reaction to these organisms, and I suspect that this is a reflection of the profound leukopenia which was present in this patient. As far as the lungs were concerned, there were numerous areas of infarction. Microscopically, many areas showed what appeared to be early infarction, with extensive hemorrhage, early necrosis, and massive edema. In other sections, this process had already gone on to complete infarction. Lying in and about the areas of infarction were numerous forms of this peculiar fungus. Many of these appeared to be penetrating vessel walls, and there was thrombotic debris which contained not only this fungus, but another one in addition. This appeared to be a species of *Candida,* although it was not cultured post mortem. I believe it certainly contributed to the lesions that were present in this patient and particularly the lesion in the esophagus and the pulmonary lesion. Silver methenamine stains bring out the fine, delicate character of the *Candida,* as opposed to the flat broad septae of *Mucor.*

"The lesion in the stomach was, indeed, an infarct, and sections showed numerous occluded vessels. Most of these contained both fungi referred to previously. Likewise, the liver showed numerous areas which varied from early infarction to areas in which the process had become complete. In the kidney, there were also numerous infarcts, similar to those described in other organs, and here, too, many of the vessels were obstructed by *Mucor.*

"As to the cause of his leukopenia or agranular cytopenia; this is not evident from my slides. The postmortem bone marrow did show what appeared to be hypercellularity rather than hypocellularity, but there were few, if any, mature granulocytes to be seen. There were numerous megakaryocytes.

"In addition to infection with two fungi, and probably infection with gram negative bacteria, the patient also had chronic pyelonephritis. I suspect that this may have given rise to the bacteremia, and that this probably played a terminal role. One can only speculate as to how long this patient had had fungus disease. A person can live for a considerable length of time with *Candida.* It is felt that once infection with *Mucor* sets in, however, death usually follows within two to five days. There are not an awful lot of cases of mucormycosis available for study. It usually is associated with some underlying debilitating disease or perhaps in association with a disease such as leukemia or agranulocytosis, regardless of the cause. It is one of the complications which one must consider in the therapy of certain of the malignant diseases. Are there other comments?

"Dr. Allison, in your experience what can you tell us about this peculiar organism?"

MUCORMYCOSIS

Dr. Allison: "Well, the pathologist usually finds it, and you have described the clinical circumstances where we expect to run into it. This is so particularly in the patients previously subjected to intensive chemotherapy for malignant disease with a major suppression of bone marrow and antibody function. These patients get infected easily and require treatment with antibiotics so that one has a beautifully preserved, living culture medium unable to resist invasion by almost any organism. These fungi are of very low pathogenicity under normal circumstances. In such a patient as this, they are then able to invade and produce disease. We have had a number of patients to succumb in this way, and as far as I know, there is nothing that can be done for them. It is of interest that we have not seen it as much in diabetics as in terminal malignancies with few circulating leukocytes. I was wondering, Dr. Thompson, with all of the drugs employed, couldn't the granulocytes have been suppressed, although it is difficult to decide which drug was responsible. Perhaps he did have a Friedlander's type of infection initially, Dr. Brunson, and this persisted despite all efforts of treatment. The antibiotic therapy received before he was hospitalized may have contributed to the leukopenia."

Dr. Brunson: "Do you think this has ever been recorded with long-term Dilantin?"

Dr. Allison: "I do not really know."

Dr. Brunson: "Dr. Langford, do you have anything? These are unusual cases, I think."

Dr. Langford: "No, I think one can place the facts together with what I learned from Dr. Thompson and say that the Dilantin or some drug suppressed the white count and this allowed the secondary infection. However, I would prefer to leave it basically unexplained for the moment. I think that is the safest way out." ★★★

2500 North State Street

RENALLY INSUFFICIENT

A hypochondriac phoned his doctor immediately after reading an article on kidney diseases with a comprehensive self-diagnosis. The doctor attempted to explain that in that particular disease there were no pains or discomfort of any kind. "I knew it," gasped the hypochondriac. "My symptoms exactly."

Radiologic Seminar XXIII: Symptomatic Lower Esophageal Ring

ROBERT P. HENDERSON, M.D.
Jackson, Mississippi

THE POSSIBILITY of a lower esophageal ring should be considered in any case of dysphagia, particularly in the long-standing episodic type, occurring with the ingestion of solids but not with liquids. The severity of the dysphagia may vary from hesitation of the bolus to a total obstruction.

Schatzki and Gary[1] first described this entity in 1953 as a smooth, symmetrical diaphragm-like narrowing at the lower end of the esophagus, located 4 to 5 cm. above the diaphragm and usually having a thickness of 2 to 4 mm. Three years later the same authors[2] again reported on the lower esophageal ring. They found that dysphagia occurred in all cases in which the diameter of the ring was less than 13 mm., with no dysphagia occurring when the diameter was over 25 mm. Of the in-between group the majority had no dysphagia. In this article they reported 21 patients with dysphagia due to lower esophageal ring, and they had accumulated 64 cases with an asymptomatic lower esophageal ring. They noted an upward displacement of the stomach into the chest in these cases, and felt that an associated hiatus hernia was one component of the entity. Wilkins and Bartlett[3] reported eight cases of lower esophageal rings which had been corrected surgically with either partial or total excision of this ring. In all eight cases it was noted both grossly and microscopically that there was esophageal squamous epithelium on the superior aspect of the web-like ring and glandular gastric mucosa on the inferior surface of this ring. The mucosa was reported as being smooth, but there was a variable degree of submucosal fibrosis in the resected specimens.

A lower esophageal ring is demonstrated by barium swallow with fluoroscopy and spot films. The ring is outlined by distending the lower esophagus with barium with the patient in the prone position and partly turned on his right side.

A lower esophageal ring should be considered as a diagnostic possibility in all cases of dysphagia. On radiologic examination, this disorder may be demonstrated by barium swallow with fluoroscopy and spot films. The author discusses etiology and radiologic diagnosis and presents a case report.

The obstructive component may be shown by having the patient swallow a gelatin capsule filled with barium.

CASE REPORT

A 62-year-old college professor had a history of intermittent dysphagia for 15 years, becoming slightly progressive. He stated that with breakfast there was usually no dysphagia, but frequently solid food would stick in the lower esophagus during lunch and dinner. After a few minutes delay the food would pass into the stomach. Occasionally, he would forcefully regurgitate saliva which had accumulated in the esophagus. He stated that he had avoided banquets and dinner parties because of the length of time it took him to finish a meal. Figure 1 shows the lower esophageal ring in this patient to good advantage. There is a maximum diameter of 10 mm. at the level of the ring. The patient has been followed for a year without change in size of the ring, and some relief of symptoms has followed a change in dietary habits.

SUMMARY

A lower esophageal ring is significant in that it may be a cause of dysphagia. It is of interest that according to present knowledge it represents the

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Mississippi Baptist Hospital.

Figure 1. These are two spot films of the cardio-esophageal junction taken at the time of fluoroscopy when the bolus of barium reached this lower esophagus. Both of these views show the maximum diameter of the ring to be 10 mm., although one of the views shows more distention of the lower esophagus than does the other. Note the gastric mucosa below the ring, which appears to be located about 4 cm. above the diaphragm. It should be noted that the hiatus does not appear to be larger than normal as in the usual cases of hiatal hernia.

junction of esophageal and gastric mucosa. Since it is located 4 to 5 cm. above the diaphragm, it is therefore concluded that a hiatal hernia is associated with a lower esophageal ring. There is considerable question as to whether these hiatal hernias associated with the lower esophageal rings are symptomatic. ★★★

1151 North State St.

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AND NOTHING BUT

Truth in labeling can go too far: Imagine Omar Khayyam wooing his girl friend with: "A loaf of bread, vitamin D and calcium propionate added to retard spoilage, a jug of wine, color added, and thou. . . ."

SPECIAL ARTICLE

The Morality of Medicine

JOHN G. ARCHER, M.D.
Greenville, Mississippi

The principles under which today's physicians practice compose one of the oldest and best known of the world's ethical systems. Dr. Archer begins even before Hippocrates' time, and traces the development of this system with special emphasis on The Principles of Medical Ethics of the American Medical Association. *He observes that little change has occurred in medicine's pattern of morality since Hippocrates, but great change has come in the practice because of the different cultural environment.*

IF WE COULD HAVE, or if we could do, all we wish, there would be no books on ethics. Life would present few, if any, problems. If we could, at any time, rearrange things to our better liking, if we could annul the actions we later find unwise, if we could at will go back to an earlier situation and start afresh, there would be no crises, disappointments, or tragedies."

In these cogent lines, Professor William Henry Roberts sums up by fascinating negation the real reasons why society must address itself to the study of ethics. A common error of belief, often swallowed as fact, suggests that the medical profession has a corner on systems of ethics. Actually, physicians have borrowed heavily from the thinking of philosophers, princes, and paupers in developing their guides for moral conduct. Interestingly enough, the morality of medicine predates its science by many centuries.

Hippocrates told us that "a physician should be an upright man, instructed in the art of healing, modest, sober, patient, prompt to do his whole duty without going so far as superstition, conducting himself with propriety in his profession and in all the actions of his life."

Nelson observed that these 50 words of classical Greek established a foundation for nearly all systems of ethics which 22 succeeding centuries have failed to add or take away a single tenet. But Hippocrates benefitted from the work of notable predecessors, too, especially that of Hammurabi of Babylonia. This benevolent despot reigned from about 2123 to 2081 B.C. over a nation much better remembered for its worldly lusts than for its morality. Yet, Babylonia was governed by a code of ethics which treated the legal and moral aspects of virtually every problem confronting that ancient civilization. It even defined the physician-patient relationship. Some scholars believe that certain oriental codes were written before Hammurabi's day.

Scientific medicine reached its majority in the early 19th century, and so did today's system of medical ethics. In 1803, Percival published his "Principles of Medical Ethics." Forty-four years later at Philadelphia, the American Medical Association's founding meeting was conducted, and one of the two formal actions was that of adopting the first version of the familiar document, the *Principles of Medical Ethics of the AMA.*

ETHICS—A SEARCH

Ethics is difficult to define in concise fundamentals. But this should not be distressing, because the age in which we live is proof enough that there can be no simple answers to complex questions. So in general terms, ethics is a continuing search for principles by which choice can

President, Mississippi State Medical Association.
Read before the senior medical students, University of Mississippi School of Medicine, Jackson, January 13, 1964.

be guided. It is a system of values based upon truth and good. Ethics cannot be called a science, if the latter is conceived as a synonym for that which is certain and verified.

Aristotle said that "like archers, we shall stand a better chance of hitting upon the right if we can see the target." Full sight of the target, our goals and objectives, obviates the hazard of abandoning choice to unguided impulse. The moral individual seeks the better and enduring satisfactions after due consideration of the consequences which his choice will most likely incur.

In nearly every act of our respective lives, we are confronted with choices involving two or more alternatives. Many choices we must make are absurdly simple, and some are astonishingly difficult. For most, there is no problem in choosing between robbing a bank and working to earn a livelihood. If there is no choice to be made, then there is no problem. If there is only one course possible, the uncertainty of choice is removed, and we follow that course.

An example is found in the story of the woman passenger who approached the ship's captain and said, "If I become seasick, what shall I do?" To which the captain wisely replied, "Don't worry, madam, you'll do it!"

JUDGMENT

In choosing, we exercise as many as four types of judgment. The first and most important is moral judgment, that of distinguishing between right and wrong, good and bad. Aesthetic judgment classifies objects and acts as beautiful or ugly. Prudential judgment should tell us the difference between that which is wise and that which is foolish. Logical judgment deals with the validity or fallacy of those things by which we would prove our positions.

But our judgment is never better than our information. To make *informed* judgments, we must possess the necessary knowledge and the ability to use it. This we call wisdom.

In substance, the pursuit of living and doing involves choices. Using a framework of guides to distinguish good and evil, the ethical individual endeavors to consider the consequences to which his choice will commit him. He tries to select that course toward that which is true, enduring, and morally rewarding. And especially is this true in the practice of a profession.

A professional person renders a specialized service under special circumstances with the hope and expectation of achieving a particular result. Generally, the service is not obtainable from other than the professional provider, and it is usually characterized by quality and integrity. All of this presupposes a very special qualification to render the service, really a warranty upon the provider's ability to undertake the task.

These frames of reference suggest that providers of professional services are not only qualified but that they are sanctioned in their endeavors by their fellow men. Logically, these professional people must impose additional limitations upon themselves with respect to this privilege and responsibility. We call these additional and voluntarily assumed limitations a system of professional ethics. A profession so ordered and organized is therefore a monopoly of integrity possessed of the characteristics of learning, licensure, and ethics.

MEDICAL ETHICS

The most celebrated system of ethics in our society today is that of American medicine. The present version, the yardstick by which all physicians are urged to measure their professional and private conduct, is a modest and unassuming document of about 500 words. Its format is relatively new, because it was formally adopted in 1957 after two years of debate. The former version, a lengthy monograph of some 47 sections, had become cluttered with the dicta of etiquette and manners intermingled among guides for moral conduct and professional obligation.

The Principles of Medical Ethics of the American Medical Association is a model of objectivity and clarity. In the fewest possible words, it exhorts the physician to dedication, honesty, competence, responsibility, moral attainment, and good citizenship. Nelson noted that "except for eight words in Section 5, there is no reference, direct or indirect, to professional freedom . . . yet the whole of the document is a declaration of moral freedom—but only freedom to choose the right."

So frequently, we hear our colleagues refer to our "code of ethics." The Preamble of the *Principles* quickly sets this matter at rest by stating that "they are not laws but standards by which a physician may determine the propriety of his conduct in his relationships with patients, with colleagues, with members of allied professions, and with the public." We are not dealing with a code which, in the legal sense, is a systematic body of law given statutory force. We are dealing with guides, admonitions, injunctions, and moral yardsticks.

SECTION 1

Section 1 of the *Principles* states the aims of American medicine: "The principal objective of

the medical profession is to render service to humanity with full respect for the dignity of man. Physicians should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion."

The admonition of Hippocrates rings in this injunction, recalling that the physician should be "modest, sober, patient, prompt to do his whole duty without anxiety."

SECTION 2

Since service to humanity carries the obvious connotation of competence, it is only logical that Section 2 exhorts the profession to exert a conscious and continuing effort toward that end. It states: "Physicians should strive continually to improve medical knowledge and skill, and should make available to their patients and colleagues the benefits of their professional attainments."

And Hippocrates had a word for this, too. In the celebrated oath, he has us pledged "to teach them this art if they should wish to learn it, without fee or stipulation, and that by precept, lecture and every other mode of instruction, I will impart a knowledge of the art to my own sons and to those of my teachers, and to disciples bound by a stipulation and oath . . ." It has been recently observed that "the greatest strength of any profession is . . . within itself because it alone has the responsibility of its perpetuation, it alone has the responsibility for the extension of its knowledge, and it alone, for the scope of its services."

The mention of making professional attainment freely available to patients is equally important as the teaching responsibility. As recently as 1959, a president of the American Medical Association said that "years of experience have indicated that the quality of medical care rendered will not be uniformly of the high standard that the public has every right to expect without some definite stimulus to insure that all practicing physicians regularly keep abreast of important developments in medicine." Some medical organizations have translated these suggestions and guides into hard realities. For example, a physician, once elected to membership in the American Academy of General Practice, must maintain his postgraduate training at or above required minimums on pain of expulsion.

SECTION 3

The third section sets science apart from quackery and supersition. It advises that "A physician should practice a method of healing founded on a scientific basis . . ." and reminds him that "he should not voluntarily associate professionally with anyone who violates this principle." Here is the moral basis for our prohibiting voluntary association with chiropractors, naturopaths, and other irregular practitioners whose "systems of healing" have no basis in fact and, indeed, are worthless if not harmful.

There are two other schools of practice within the meaning of Section 3. The first is osteopathy, founded as a cult but now practiced largely as medicine. Very few osteopaths hold to the original notions of Andrew Still and his manipulative therapy. In fact, 39 states grant osteopaths unrestricted licenses to practice medicine. Mississippi is among the 11 states which do not. Voluntary association with osteopaths is left to the decision of the state medical association, and 15 states have removed all prior proscriptions in this respect. Again, Mississippi has made no such pronouncement.

The second discipline is that of optometry. Under a ruling of the American Medical Association made in 1955, it is unethical for a doctor of medicine to associate voluntarily with an optometrist. In its Opinions and Reports published as a special edition of the *Journal AMA* in 1958, the AMA Judicial Council stated that "At no time have optometrists been officially declared sectarian or cult practitioners." Pointing out that optometry, "a licensed occupation under most, if not all, state laws," has as its function the determination and correction (by lenses) of mechanical defects of the eye, the Judicial Council added that "Optometrists are neither qualified nor licensed to do more than ascertain if mechanical defects exist and to correct them when necessary." The proscription of voluntary professional association is merely an affirmation of the futility of a physician's consulting at the professional level "with one who does not possess the same knowledge, training, experience, and ideals as the doctor of medicine."

SECTION 4

A cardinal hippocratic principle is invoked in Section 4 which states that "The medical profession should safeguard the public and itself against physicians deficient in moral character or professional competence. Physicians should observe all laws, uphold the dignity and honor of the profession and accept its self-imposed disciplines. They should expose, without hesitation, illegal or unethical conduct of fellow members of the profession."

The nature and characteristics of medicine being what they are, it is obvious that the profession contains the seeds of its own destruction. If we nurture or even condone the incompetent, the morally deficient, or the willful violator, then we are helping these seeds to germinate. If, for any physician, this section raises a question of his being bound or free, he should brush aside the semantics of the issue and realize that the only question involved is by what the ethical physician shall be bound.

SECTION 5

"A physician may choose whom he will serve," assures Section 5 of the *Principles*. With the single reservation that "In an emergency, however, he should render service to the best of his ability," the doctor is free, as is his patient, to select both the circumstances as well as the individual to whom his professional endeavors relate.

Two of the most solemn injunctions in the entire document are contained in this section: "Having undertaken the care of a patient, he may not neglect him; and unless he has been discharged he may discontinue his services only after giving adequate notice. He should not solicit patients." In many states, medical licensure and professional conduct laws have formalized these two aspects of Section 5 into law.

SECTION 6

Section 6 warns that "A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quality of medical care." No other section of the *Principles* has been more frequently discussed nor has more been written over any other portion.

Generally, this section encompasses the issues of corporate practice, exploitation of a physician through employment arrangements, and the force of third parties in the physician-patient relationship. Employment arrangements, apart from institutional employment as in psychiatric hospitals or the federal medical services, usually involve those between a hospital and a pathologist, radiologist, physiatrist, or anesthesiologist.

The famous Hess Report to the AMA House of Delegates in 1951, entitled "Relation of Physicians and Hospitals," advanced three general principles on employment arrangements:

First, the physician was cautioned against disposing of his services to any hospital, corporation, or lay body by whatever name called under terms or conditions which permit the sale of the services of that physician by such agency for a fee. Second, the report clearly permits a financial arrangement between the physician and hospital but only when the latter is not selling the services of the physician. Finally, the practices of anesthesiology, pathology, physical medicine, and radiology are declared integral parts of the practice of medicine "in the same category as the practice of surgery, internal medicine or any other designated field of medicine."

Corporate practice is appropriately treated by law as well as medical ethics, and third parties have been defined in statutory and case law. The latter include, of course, those third parties having a lawful responsibility for payment of fees in whole or part. While different philosophies as to the impact and influence of third parties are held by reputable physicians, it should suffice to say that the third party's responsibility should be discharged according to contract and law without entering into the physician-patient relationship.

SECTION 7

The sole reference to economics in the *Principles* may be found in Section 7. It states: "In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him, or under his supervision, to his patients. His fee should be commensurate with the services rendered and the patient's ability to pay. He should neither pay nor receive a commission for referral of patients. Drugs, remedies, or appliances may be dispensed or supplied by the physician provided it is in the best interests of the patient."

Condemnation of fee-splitting, ghost surgery, and similar unwholesome practices is forcefully apparent in the first sentence of this section. The reasonableness of professional fees, sometimes a basis for grievance committee action at local medical society level, and the suggestion of rendering care to those unable to pay are prominent. The final sentence, however, has been frequently and heatedly debated in the highest councils of the profession.

Until 1955, the dispensing of drugs and appliances, glasses being the most frequent among the latter, was not forbidden. Because certain state pharmacy associations had raised objections to dispensing of drugs by physicians and because of some court actions with respect to the dispensing of glasses by ophthalmologists, the issue was one for discussion at the 1955 annual session of the

American Medical Association. The old *Principles of Medical Ethics* was formally amended to hold such services as ethical provided there was no exploitation of the patient.

In 1962, four issues relating to Section 7 were raised by the AMA Judicial Council: physician ownership of pharmacies, dispensing of glasses by ophthalmologists, advertising practices of medical laboratories, and physician ownership of drug repackaging houses. The first and second have been held as ethical provided they are in the best interests of the patient. Medical laboratory advertising practices are ruled on at the state association level, and it is now unethical for a doctor of medicine to own an interest in a drug repackaging house.

SECTIONS 8, 9, 10

The final sections of the *Principles,* 8, 9, and 10, relate to the conduct of the physician in professional and private life. He is encouraged to seek consultation upon request, in doubtful or difficult cases, and when it appears that the quality of medical care may be enhanced thereby. He is admonished not to disclose confidences reposed in him by the patient or any character deficiencies observed during the course of care. He is exhorted to uphold all laws and to fulfill his obligations as a citizen as well as a practitioner of an honorable and noble professional calling.

SUMMARY

What was apparent to Hippocrates is apparent in physicians today. Little, if any, change has occurred in medicine's pattern of morality. It was begun upon the highest plane where it remains today. What *is* different is the practitioner by reason of his cultural environment. The pyramiding fund of scientific knowledge, the vastly increased capability of the physician, the miraculous armamentarium at his disposal, and the economic phenomena we call health care financing create daily problems of choice of which Hippocrates could never have thought possible. Yet, the basic tenets handed down through the centuries are adequate for this and succeeding centuries. ★★★

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MEDICAL MAGIC

The noted research psychologist whose studies of behavorial patterns in rodents had won him fame was being interviewed.

"Exactly what do you do in your work?" he was asked.

"Oh, I just pull habits out of rats."

Book Reviews

Results of Surgery for Peptic Ulcer. Edited by R. W. Postlethwait, M.D. and James C. Thoroughman, M.D. 308 pages. Philadelphia: W. B. Saunders Company, 1963. $8.00.

This volume summarizes the combined experience of 12 Veterans Administration Hospitals in the management of peptic ulcer. There were nine surgeons, all with the Veterans Administration, who collaborated in the preparation of the material. The study was organized in 1957, with the year 1947 designated as the first year for entry of cases. The book is divided into 14 chapters with 166 tables and 63 figures. The authors were able to collect 1,844 cases of duodenal ulcers, 430 cases of benign gastric ulcers and 105 cases of marginal ulcers, all of which necessitated surgical management. The most common indication for surgery among the cases of duodenal ulcer was hemorrhage while intractability represented the second most frequent indication. The mortality rate was highest in those instances where surgical intervention was necessitated by hemorrhage, especially where an emergency procedure was executed.

In those cases treated by gastric resection the mortality rate was 4.1 per cent and a satisfactory result was obtained in 82.1 per cent where resection alone was used. Where vagotomy was combined with gastric resection, satisfactory results were observed in 86.9 per cent of cases. The mortality rate for vagotomy combined with a drainage procedure was 9 per cent. Of interest was the fact that among the 105 cases of marginal ulcer, not one had been treated by vagotomy in combination with gastrectomy.

The book suffers from a degree of dullness which is characteristic of any presentation concerned almost wholly with numbers and statistical compilation. However, the overall effort represents a commendable approach for the assessment of the ulcer problems and the abundance of material eliminates a shortcoming so characteristic of many similar attempts. The decision to continue the study with additional current reports in the future is also welcomed news.

This book will represent a profitable investment for the substantial segment of the medical profession who are interested in the management of medically unresponsive peptic ulcerations.

William O. Barnett, M.D.

Handbook of Pediatric Medical Emergencies. Third edition. By Adolph G. DeSanctis, M.D., Professor Emeritus of Pediatrics, Post-graduate Medical School, New York University, Bellevue Medical Center, New York, and Charles Varga, M.D., chief, Department of Pediatrics, The Permanente Clinic and Bess Kaeser Hospital, Portland, Oregon. 457 pages with 85 illustrations. St. Louis: The C. V. Mosby Company, 1963. $6.85.

The current edition of this handbook of medical emergencies has succeeded in producing what should be a necessary addition to all hospital emergency rooms as well as pediatricians' offices. This excellent little book is for *using* not reading since it is written in lucid outline form and is essentially a valuable book.

Drs. DeSanctis and Varga have drawn on the experience of eleven well known contributors for this third edition. The chapters on cardiovascular emergencies and metabolic emergencies have been completely rewritten. Two new chapters, emergencies in the newborn (which is excellent) and psychiatric emergencies, have been added to this edition. A greatly enlarged pediatric dosage of drugs is also presented. The chapter on poisoning should be especially useful to the practitioner. Trade names of poisonous household and garden products are included which should facilitate speed in deciding on antidotes.

For those not familiar with this excellent little book the following chapters on emergencies are presented: cardiovascular, metabolic, genitourinary, neurologic, respiratory, newborn, anesthesia, shock, hemorrhage, physical and chemical agents, eye, hypersensitivity and toxins, psychiatric, poisoning, and accidents. An excellent chapter on pediatric procedures is also included.

Some may complain about the price of this book in relation to size but those who use it will recognize its value.

William F. Calhoun, Jr., M.D.

The President Speaking

'Another Role of Service'

JOHN G. ARCHER, M.D.
Greenville, Mississippi

THE PUBLIC SERVICE ROLE played by Mississippi physicians is considerable, even if generally unpublicized. About 200,000 patient days of care in hospitals are rendered without charge to the indigent under the State Hospital Commission and charity hospital programs. By the most modest estimates, that's better than $2.5 million in professional services each year. Countless thousands of patients are cared for without charge in voluntary health agency programs and in physicians' private practices.

State doctors devote themselves to service on medical advisory committees, in medical and health aspects of civic work, and perhaps least known of all, to medical missionary tasks. A Mississippi physician is usually found on the players bench in high school athletic events. Hundreds of physicians are trading their off time on Sundays—and other days, too—for the worthy end of eliminating poliomyelitis.

Most recently, Mississippi medicine has initiated another important public service project, the MSMA Emergency Medical Care Unit in the state capitol. Staffed by a full time registered professional nurse in the employ of the association and a volunteer "Doctor of the Day," the unit is a tangible expression of physicians' concern for the good health of our legislators. The project has been warmly received by state officials, and response from association members has been gratifying.

As the 1964 regular session hits the midway mark, let not a single active member fail to show his or her concern for the well-being of our public officials by not volunteering a day at Jackson in the emergency unit. It is a rewarding experience of public service. ★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume V, Number 3

March 1964

EDITORIALS

First the Machine, Then the Man

I

THE SLAUGHTER on America's highways is the most senseless, wanton waste of human life in our civilization. Which waste, it is pertinent to observe, raises a question as to the qualifications of society to be described as civilized. And while everybody appears to be doing something about automotive accident fatalities, the tragic fact remains that the gaunt guy in the black hood has the score on his side. In 1963, more Mississippians died in automobile mishaps than in any prior year.

Potentially, this bad record might be worse. Two-car families are becoming three-car groups. The auto makers rewrote the record book in 1963 with the manufacture and sale of 7.5 million vehicles, and 1964 looks as good. So the exposure to automotive fatality, based on the simple fact that more people are driving more cars, is increasing. Two possibilities are obvious: The safety factor in man and machine must improve at a greater rate than exposure, or the death toll can only continue its upward trend. And the other possibility offers a glimmer of hope: The passive safety measures must be paying off, or the slaughter would be greater.

These passive measures are mostly technological. They include the seat belts, padded interiors, safety locks, better tires, and the like. There's no denying the lifesaving value of these manufacturing improvements in that lethal American necessity, the modern automobile. Spokesmen for the Automotive Crash Injury Research project at Cornell University contend the statement that "seat belts save 5,000 lives annually . . ." is obsolete; they say it should now be revised upward to 10,000 lives.

II

However ingenious the engineering and however effective the failsafe features of the motor car, it can and will be as destructive as the driver makes it. Or as safe.

A plethora of considerations enters the picture in the making of a safety conscious driver. Not only must he *want* to be a careful driver, he must also *be able,* physically and emotionally, to achieve this goal. And not the least among these vital factors is maturity of judgment. This adds up to evaluating the medical side of vehicle operation.

The American Medical Association's Committee on Medical Aspects of Automotive Safety has devoted itself to this difficult question. Logically, these studies were begun on the premise that a person must possess certain minimum physical and mental abilities to operate a motor vehicle safely. The goal of licensing, the committee believes, should be to grant the privilege to all applicants who can operate a car with safety to themselves and others and to restrict, withdraw, or deny the license to those who present an unwarranted risk.

At the outset, it is obvious that the giving of medical examinations initially or periodically to the 91 million Americans who drive automobiles would be using medical manpower with less than optimum effectiveness. Continues the AMA committee: "No scientific data are available to indi-

cate that drivers with any particular disease, including diabetes, epilepsy, color blindness, cardiovascular disease, or deafness, have higher accident rates than comparable groups not having the condition. The identification of persons with certain diseases is of little value in preventing accidents."

Astonishingly, there are limited studies tending to demonstrate that certain groups with physical impairments have fewer accidents than those without these conditions. So it's only reasonable to conclude that some of the impaired show awareness of their limitations and compensate accordingly. The observation is further validated by the record of the young male adult group, ages 16 to 25, who have the highest accident rate and the fewest physical impairments.

III

The American Medical Association believes that physicians must assume leadership in developing medical criteria for driver licensing. The diagnosis of medical conditions affecting the ability of an individual to operate a motor vehicle is the responsibility of physicians and none other. A soundly developed program of driver limitation, the AMA believes, will contribute meaningfully to automobile accident prevention. Any such program should include the following principles:

—Age *per se* should not be a limitation except for the initial or minimum licensing age; rather, the functional capacity and ability of each individual should be the determining factor.

—Psychiatric disturbances are recognized as potential factors in auto accidents.

—Acute and short term disabilities should be recognized in relation to driver limitation. In chronic conditions, only uncompensated or intractable medical limitations are of concern in vehicle operation.

—Driver limitation may be created by a single major impairment or multiple minor impairments, either rendering the individual incapable of safe vehicle operation.

Other considerations include temporary or constant use of drugs, mental retardation below the ability to read, stated neurological defects and cardiovascular conditions, severe and gross obesity, notable sensory deficits, alcoholism, and certain medical conditions demanding individual analysis.

IV

A four point yardstick has been suggested for requiring medical examination of driver license applicants: When the applicant displays an obviously impaired physical condition; when a driver has been involved in multiple accidents within a short calendar period; when a driver must be placed in the assigned risk pool for insurance because of refusal by commercial carriers to provide coverage on individual application; and when a driver voluntarily suggests that he blacked out or that other medical problems may have contributed to an accident.

The task of making the machine safe for man is much simpler than the ongoing problem of making man safe for the machine. It may be difficult, if not impossible, to discover immature judgment until it's too late. Some limiting conditions can be concealed by license applicants. And, rarely but fatally, a limiting condition can appear without warning in an otherwise unimpaired driver.

Education and support of law enforcement agencies are vital in any program aimed at reducing the carnage on the highways. But for the safety of themselves and others, those who are not physically and mentally able should not be legally able to drive to doom.—R.B.K.

The $alutary $aga of $mokey Bear

The poverty-attacking, welfare-for-everybody, more-bang-for-a-buck $97.9 billion budget is an intriguing thing to study. Out of each in this astronomical pile of dollars, 62 cents goes for defense, space, and foreign aid. A whopping 11 cents pays interest on the nation's living beyond its means—the politically polite expression is "debt service." Federal health, welfare, veterans, and labor activities come in for another 11 cents, and the agricultural mess gets a nickel. This leaves 11 cents for all other government costs.

Even without the tax cut, the budget will be almost $5 billion in the red, and by the end of fiscal 1965, the public debt shall have escalated to $317 billion. Add to that the unfunded Social Security "obligation" of more than $300 billion to get some idea of the fiscal Russian roulette we're playing.

But take heart, weary taxpayer, because the same budget shows a new source of revenue. It seems that Smokey Bear's patriotism now extends

beyond the prevention of forest fires; he's also a moneymaker for Uncle Sam. Smokey is owned by the U. S. Forest Service which collects royalties from manufacturers of sweatshirts, cookies, and various sundries bearing his likeness. Now comes a Smokey Bear bubblebath which will up his earnings to $45,000 a year. Maybe this can help offset the welfare deficit.—R.B.K.

Just Sign Here

Conrad Hilton, the international hotel czar, is extending his activities into the field of medical care. Newest service for Carte Blanche credit card holders is the guarantee of the first $200 charged by any one of 1,200 participating hospitals on inpatient accounts. The medical service credit card concept isn't new, because special promotions in this connection have been made by various private agencies during the past three years.

The entire idea has been greeted with mixed emotions by some providers of care. There are contentions that this may create more problems than it solves. Some say that the dignified, personal aspects of medical care are being used in commercial promotions. On the other hand, there are those who feel that this extension of private care financing is compatible with the traditional pattern of providing medical care in the United States.

What stands out in the unusual announcement by the Hilton organization is the significance placed on *post*payment and the suggestion that there may be developed private means for making this concept as important in medical care financing as *pre*payment.—R.B.K.

PERSONALS

William O. Barnett, associate professor of surgery at the University of Mississippi School of Medicine, has been made chairman of the postgraduate education committee. Dr. Barnett succeeds Watts R. Webb of Jackson. Benjamin F. Banahan, Jr., clinical assistant professor of preventive medicine at the University, is a new committee member.

Julius A. Bosco of Pascagoula has been named a Fellow in the American College of Obstetricians and Gynecologists.

Walter L. Bourland of Tupelo has been named chief of the medical staff at North Mississippi Community Hospital.

James M. Brock has been named to the advisory board of directors of the McComb First National Bank.

Lucius W. Brock of McComb was recently elected president of the Pike County Fair and Livestock Association.

Elmer D. Gay of Gulfport was recently elected president of the Colonial Patriots Chapter of the Sons of the American Revolution.

I. C. Knox, Jr., was recently awarded a certificate of merit for his outstanding service to the Vicksburg City Beautification Commission. Dr. Knox founded the commission and was its first chairman.

James L. Royals has been elected president of the North Jackson Kiwanis Club.

Orville P. Stone and Roy C. McGlamery have announced the association of Thomas L. Ketchum for the practice of medicine in the Ripley Medical Clinic. Dr. Ketchum received his medical degree from the University of Mississippi School of Medicine and interned at the Balboa Naval Hospital, San Diego, Calif.

Margaret P. Veller has been appointed chairman of the March of Dimes Scholarship Committee for Natchez and Adams County.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

Birdsong, William Eugene, Iuka. Born Meridian, Miss., Oct. 21, 1935; M.D., University of Mississippi School of Medicine, Jackson, 1960; interned City of Memphis Hospitals, Tenn., one year; captain, U. S. Army; elected Dec. 10, 1963, by Northeast Mississippi Medical Society.

Green, John Edward, Hattiesburg. Born Hattiesburg, Miss., Nov. 17, 1934; M.D., Tulane University School of Medicine, New Orleans, La., 1959; interned University of Mississippi School of Medicine, Jackson, one year; residency, Victor

C. Smith Memorial Eye Clinic, New Orleans, La., three years; elected Dec. 12, 1963, by South Mississippi Medical Society.

IRBY, OSCAR WILSON, Meridian. Born Stonewall, Miss., Jan. 3, 1928; M.D., University of Mississippi School of Medicine, Jackson, 1962; interned Baptist Hospital, Nashville, Tenn., one year; elected Jan. 21, 1964, by East Mississippi Medical Society.

LOUIS, TOM, III, Jackson. Born Austin, Tex., Aug. 16, 1932; M.D., Tulane University School of Medicine, New Orleans, La., 1957; interned Charity Hospital of Louisiana, New Orleans, one year; otolaryngology residency, Charity Hospital of Louisiana, New Orleans, three years; certified by the American Board of Otolaryngology; captain, U. S. Air Force, two years; elected Nov. 5, 1963, by Central Medical Society.

MCCASLIN, DAN LESTER, Columbus. Born Dickson, Tenn., March 9, 1935; M.D., University of Tennessee College of Medicine, Memphis, 1960; interned John Gaston Hospital, Memphis, Tenn., one year; elected Dec. 10, 1963, by Northeast Mississippi Medical Society.

MILLS, HENRY PIPES, JR., Jackson. Born Jackson, Miss., Dec. 6, 1933; M.D., University of Mississippi School of Medicine, Jackson, 1957; interned Orange Memorial Hospital, Orlando, Fla., one year; residencies, Tulane University School of Medicine, New Orleans, La., one year, and Baylor University School of Medicine, Houston, Tex., two years; elected Jan. 7, 1964, by Central Medical Society.

MOFFATT, LAWRENCE STRONG, Corinth. Born Columbia, Tenn., Nov. 27, 1926; M.D., University of Tennessee College of Medicine, Memphis, 1955; interned Methodist Hospital, Memphis, Tenn., and the Medical College of Virginia, Richmond, one year; residencies, St. Thomas Hospital, Nashville, Tenn., and St. Joseph's Hospital, Memphis, Tenn.; elected Dec. 10, 1963, by Northeast Mississippi Medical Society.

RONE, WAYMOND LEE, Meridian. Born Portageville, Mo., Jan. 9, 1932; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned Baroness Erlanger Hospital, Chattanooga, Tenn., one year; radiology residency, University of Mississippi School of Medicine, Jackson, three years; elected Jan. 21, 1964, by East Mississippi Medical Society.

TUBB, GRAYDEN ALPHONSO, Fulton. Born Amory, Miss., April 21, 1935; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned U. S. Naval Hospital, San Diego, Calif., one year; lieutenant, U. S. Navy, four years; elected Dec. 10, 1963, by Northeast Mississippi Medical Society.

DEATHS

BARENTINE, BOYD GRAHAM, Laurel. M.D., Medical College of South Carolina, Charleston, 1921; interned St. Francis Xavier, Charleston, S. C., one year; residency, Eye, Ear, Nose and Throat Hospital, New Orleans, La., one year; died Jan. 25, 1964, aged 67.

DABNEY, WILLIAM CECIL, Ocean Springs. M.D., University of Virginia School of Medicine, Charlottesville, 1909; interned University of Virginia Hospital, Charlottesville; residency, Kensington Hospital for Women, Philadelphia, Penn., one year; died Jan. 14, 1964, aged 83.

JOHNSTON, WALTER EASTERLING, Vicksburg. M.D., Vanderbilt University School of Medicine, Nashville, Tenn., 1931; interned Vicksburg Sanitarium, Miss., one year; member American Academy General Practice; superintendent, Kuhn Memorial State Hospital, Vicksburg, eight years; past president, West Mississippi Medical Society; died Jan. 12, 1964, aged 58.

SHIPP, CYRUS MARTIN, Bay St. Louis. M.D., Tulane University School of Medicine, New Orleans, La., 1915; postgraduate courses, Johns Hopkins University School of Medicine, Baltimore, Md., and Vanderbilt University School of Medicine, Nashville, Tenn.; former health officer for Hancock, Pearl River, and Jackson Counties; past president, Coast Counties Medical Society; Emeritus member of MSMA; died Jan. 20, 1964, aged 83.

STINGILY, KARL OTTO, Meridian. M.D., University of Tennessee College of Medicine, Memphis, 1933; past president, East Mississippi Medical Society; died Jan. 6, 1964, aged 58.

TAYLOR, SILVANUS LEROY, Eupora. M.D., Memphis Hospital Medical College, Tenn., 1903; Emeritus member of MSMA; died Jan. 10, 1964, aged 85.

MSMA Sets Up Emergency Care Unit To Serve State Legislature's 1964 Session

MSMA's Emergency Care Unit for the state legislature opened Jan. 28 with President John G. Archer of Greenville as the first "Doctor of the Day."

The dispensary type unit will furnish emergency medical care to all legislators during the 1964 session.

Dr. William E. Lotterhos, chairman of the planning committee for the facility, and Dr. Omar Simmons, MSMA president-elect, manned the unit for the second and third day. The remainder of the schedule will be filled by volunteer physicians from all parts of the state. At the current time, the schedule has been arranged into March. Physicians are requested to write MSMA association headquarters giving two or three dates, Mondays through Thursdays, that they could serve in the unit.

During their initial sessions, the House and Senate passed a concurrent resolution of appreciation to MSMA for the facility. The measure, titled HCR 8, was introduced by the Speaker of the House, Hon. Walter Sillers, and Rep. George Payne Cossar.

Located in Room 401-B in the Capitol, the Emergency Care Unit is staffed by Mrs. Ila G. McCleave, a registered professional nurse, who renders full time service to the "Doctor of the Day." The unit opens at 9 a.m. on each legislative day and closes at 5 p.m.

The need for such a facility was pointed up during the administration just past which saw more fatalities from natural causes in the legislature than in many years. One lawmaker became ill on the floor of the House and died within two days. Another suffered an attack that for a time appeared critical. Another died at home suddenly when medical attention might have been rendered earlier. Medical attention is often needed for minor ills during an extended legislative session.

At JOURNAL MSMA press time, Mrs. McCleave reported that 61 treatments had been given through the unit's third week. Some patients were seen more than once, she noted. In addition to 10 visits by senators and 21 visits by representatives, the unit has also treated other legislative personnel such as legal secretaries, clerks of the House and Senate, page boys, and reporters assigned to the Capitol.

Nurse Ila G. McCleave and Dr. John G. Archer open MSMA's Emergency Care Unit for service to the 1964 legislative session. Located in Room 401-B in the Capitol, the unit will operate from 9-5 on legislative days.

Sore throats lead the list of ailments, reported Mrs. McCleave, with headaches following close behind. Three legislators with diagnosed hypertension and three with known cardiac disorders have registered their history and current medication with the unit and come in for blood pressure checks, she said. Other problems include laryngitis, pharyngitis, sinusitus, allergy, cough, a hand injury, a knee abrasion, a swollen jaw, and "a weak and fainty feeling." They have seen one case of gout and one wasp sting, she said.

The Emergency Care Unit was proposed and approved during MSMA's 95th Annual Session in May 1963.

Marston Urges More Funds for UMC

"The University Medical Center cannot run a satisfactory program on the appropriations the Budget Commission has recommended for 1964-1966," declared Dr. Robert Q. Marston. "The need for increased support is more crucial now than at any time since the medical school became fully accredited," the dean and UMC director stated.

Pointing to the medical school faculty of 79, down three from 1963 and 36 short of the recommended minimum strength for schools this size, Dr. Marston labels Mississippi medical school salaries as "too low to compete with other medical schools."

The school's key problem, contended the dean, is funds to support the faculty. "Failing this," he warned, "we will continue to lose strength."

Published figures show the medical school asked for $4,594,000 in state funds for 1964-1966. The Budget Commission recommended $2,994,000, a 6.92 per cent increase over the 1962-1964 appropriation which was tagged a "bare holding budget." Medical Center administrators predicted in 1962 that hard-won ground might be lost. Commission recommendations for 1964-1966 would give University Hospital a 10.34 per cent increase and the rapidly growing School of Nursing only 3.75 per cent more than its present support.

Says Dr. Marston, the medical school core faculty is stretched painfully thin teaching 604 students in all categories, pursuing creative research, and caring for large numbers of patients. The faculty, adds the dean, must extend itself even further to cover still unstaffed positions.

The medical school still lacks a gastroenterologist, pediatric hematologist, child psychiatrist, biomedical engineer, a radiation physicist and an audiologist, among other specialized personnel. These are neither new or expanded programs, asserts Dr. Marston, but disciplines essential to a first-class medical school.

Salaries competitive when the school opened in 1955 now rank near the bottom in the nation, an Association of American Medical Colleges study reveals. House staff, too, is still paid at the 1955 rate, according to the Medical Center.

Despite too little money and too few staffers, the Center has racked up a record of remarkable achievement in eight years, the dean said.

Total student body has shot up from 165 in 1955 to 604 in 1963. Some 900 degrees and certificates have been awarded. Research support has spiralled from an annual $25,000 in 1955 to over $2,000,000 yearly. Four competitive career development awards, a Lederle award, a AAAS top scientific prize, two Shipley awards, and a heart association research professorship, are among many proofs of faculty quality, Dr. Marston pointed out.

The State of Mississippi has made the effort to establish a fine Medical Center—and has succeeded, Dr. Marston affirms. "The Legislature now in session will determine the financial support of the Medical Center for the next two years—and brighten or dim its prospects for far longer."

Two Physicians Receive Fifty Year Club Awards

Drs. Thomas G. Cleveland and Herbert L. Arnold, both of Meridian, were awarded Fifty Year Club pins and certificates at a recent meeting of the East Mississippi Medical Society. Dr. Lamar Arrington of Meridian, district trustee for MSMA, made the presentations which commemorated the honorees' 50 years of medical service.

A native of Union, Miss., Dr. Cleveland received his medical degree from Tulane University School of Medicine and interned at St. Louis City Hospital, St. Louis, Mo. He is an Emeritus member of MSMA, a member of AMA, SMA, and is

Drs. T. G. Cleveland and H. L. Arnold of Meridian (left to right) were presented Fifty Year Club pins and certificates at a recent meeting of the East Mississippi Medical Society. Dr. Lamar Arrington (right), district trustee for MSMA, made the presentation.

a past president of the Lauderdale County and East Mississippi Medical Societies.

Dr. Arnold, who is a native of Walthall, Miss., obtained his medical degree from Jefferson Medical College, Philadelphia, Pa., and interned at the Methodist Hospital, Philadelphia, Pa. An Emeritus member of MSMA, Dr. Arnold is a member of AMA, Lauderdale County Medical Society, and is a past president of East Mississippi Medical Society.

An added feature of the meeting was the election of 1964 officers. They are Dr. Prentiss Keyes of DeKalb, president, and Dr. Wayne Sullivan of Meridian, secretary-treasurer. Dr. Keyes succeeds Dr. John Lindley of Meridian.

Good Press Aids Central's Polio Campaign

Central Medical Society's first Sabine Oral Sunday, Jan. 12, attracted 301,667 persons over the eight county area. Total population of the counties is 365,000 making the turnout 82.6 per cent. The society estimates that 90 per cent of the area population has now received Type I of the vaccine as all military personnel and a number of private citizens had already been inoculated.

Dr. David B. Wilson, chairman of the society's public relations committee, attributes this response to the cordial relationship between physicians and members of the news media in the society's eight counties.

This rapport, he notes, dates back to 1957 when Central began an annual news media dinner where mutual problems could be discussed. in 1958 the Jackson Area Hospital Council became a co-sponsor of the event giving hospital administrators an opportunity to talk over their news problems.

Dr. Wilson notes that one achievement of these meetings is a press code presented to the newsmen in 1960. Entitled "A Guide for Physicians, Hospitals, and News Media," this compilation was revised in 1962. It has become a code of ethics for the physicians, hospitals and members of the news media.

Another outcome, says Dr. Wilson, is the designation of a representative from each hospital to work with the various news sources. This clarification of channels has made for better relations between hospitals and the news agencies, he reports.

Among the 50 persons who attend the dinner each year are the officers of the society and members of its public relations committee, hospital administrators, their assistants and public relations representatives, executive officers of MSMA, the Mississippi Hospital Association, and Blue Cross, and representatives from the local and surrounding county newspapers, the news release agencies, and the local radio and television stations.

Hosts and guests at Central Medical Society's annual news media dinner included, from left to right, James Ward, editor, Jackson Daily News; W. F. Minor, correspondent, Times-Picayune; Dr. Jim G. Hendrick, secretary, Central Medical Society; Paul Pryor, administrator, Mississippi Baptist Hospital; Purser Hewitt, executive editor, Clarion-Ledger; Dick Sanders, news director, WLBT.

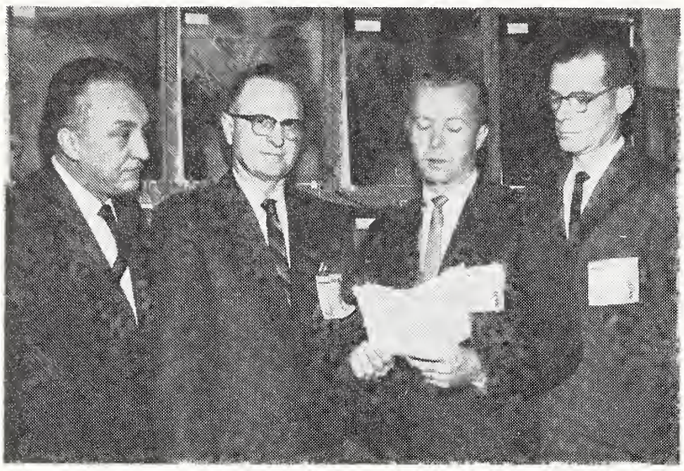
ICS Announces Writing Contest

The Women's Auxiliary of the United States Section of the International College of Surgeons will award two prizes of $300.00 to the two surgical residents preparing the best papers on any surgical subject.

All papers must be submitted in quadruplicate and must be double spaced and typewritten. They must be mailed on or before July 1, 1964, to Dr. Horace E. Turner, 1516 Lake Shore Dr., Chicago 10, Ill., International Secretary General. The two winners will be obliged to present their papers before the members of the North American Federation of the International College of Surgeons meeting at the Palmer House, Sept. 9-11, 1964, Chicago.

Dr. Lawrence W. Long, regent, Jackson, Miss., states that the Mississippi resident preparing the best paper, as declared by the National Judges in Chicago, will have his expenses paid to the convention, transportation and per diem, even though he may not win one of the two national prizes.

Eighty-five Attend Tri-State Thoracic Meet



Dr. Guy Campbell (second from left), Mississippi's representative on the program committee of the recent Tri-State Thoracic Society Consecutive Case Conference held at the Buena Vista Hotel, Biloxi, is pictured reviewing notes with Dr. Joseph W. Peabody III, a guest moderator at the meeting from Washington, D. C. Also shown are Dr. Clyde Watkins (far left) and Dr. Jack Herring (far right). Eighty-five physicians interested in tuberculosis and other respiratory diseases attended this scientific seminar from Mississippi, Alabama, and Louisiana.

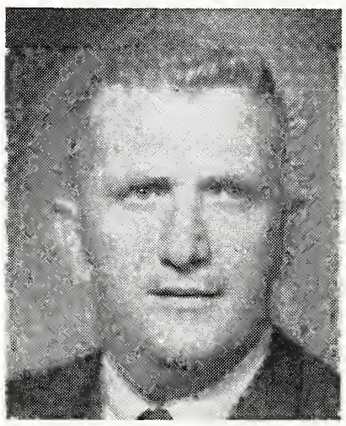
State Morbidity Reported Through Jan. 31

The Mississippi State Board of Health reports the following occurrence of morbidity for 1964 through the fifth week of the year, ending Jan. 31, 1964. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	44
Tuberculosis, O. F.	7
Dysentery	
Bacillary	1
Septicemia, Staph.	1
Meningococcus infection	1
Mononucleosis, infectious	8
Hepatitis, infectious	18
Helminthic infections	
Hookworm	65
Ascariasis	18
Strongyloides	3
Histoplasmosis	2
Streptococcus infections	
Scarlet fever	7
Strep throat	380
Pertussis	5
Measles	109
Chickenpox	98
Mumps	107
Influenza	143
Gonorrhea	437
Syphilis	
Early	25
Late	23

Surgery Section Sets Panel Discussion

One of many special features scheduled for MSMA's 96th Annual Session is a panel discussion on "Malignancy of the Breast." Planned by the Section on Surgery, the panel will include a surgeon, a radiologist, a pathologist, and a chemotherapeutist.



Dr. Keegan

The section's meeting is set for Tuesday, May 12, and will be open to all members of the association and their registered guests.

Dr. James D. Hardy, chairman of the department of surgery, University of Mississippi School of Medicine, will moderate the discussion. Panelists will include Dr. James M. Keegan, Houston, Texas, a radiologist whose work in mammography is widely known; Dr. Nylene Eckles, Houston, Texas, chemotherapeutist; Dr. Thomas F. Puckett of Hattiesburg, pathologist, and Dr. George P. Archer, Greenville, surgeon.

Dr. Eckles

Dr. Keegan is a graduate of the New York Medical College, is certified by the American Board of Radiology and is a member of the American College of Radiology. Dr. Eckles is a graduate of the University of Minnesota Medical School and is associated with M. D. Anderson Hospital.

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Continental Revises Group Life Rates

Premiums on the state medical association's group life insurance program will decrease as much as 18 per cent effective April 1, according to an announcement by the Thomas Yates Co. of Jackson, administrators of the group programs. Actual amounts of premium revision vary with charges for the several age brackets.

For the basic $10,000 coverage, semiannual rates drop in the under-age-30 bracket to $15.20 from $17, while ages 30 through 34 go down to $16.70 from $20.50 charged previously. Proportionate downward adjustments are made through age 59, the highest eligibility for initial coverage application. The term feature is renewable through age 69 and convertible above age 70, the announcement said.

Accompanying decreases were also announced for coverage in the same group plan for spouses and children. An upward revision ranging from 1 to 2 per cent, however, was announced for renewals in the age 60 through 69 levels. The original contract and its benefit provisions were in no way altered by the rate changes. The group life program is underwritten by the Continental Assurance Company of Chicago.

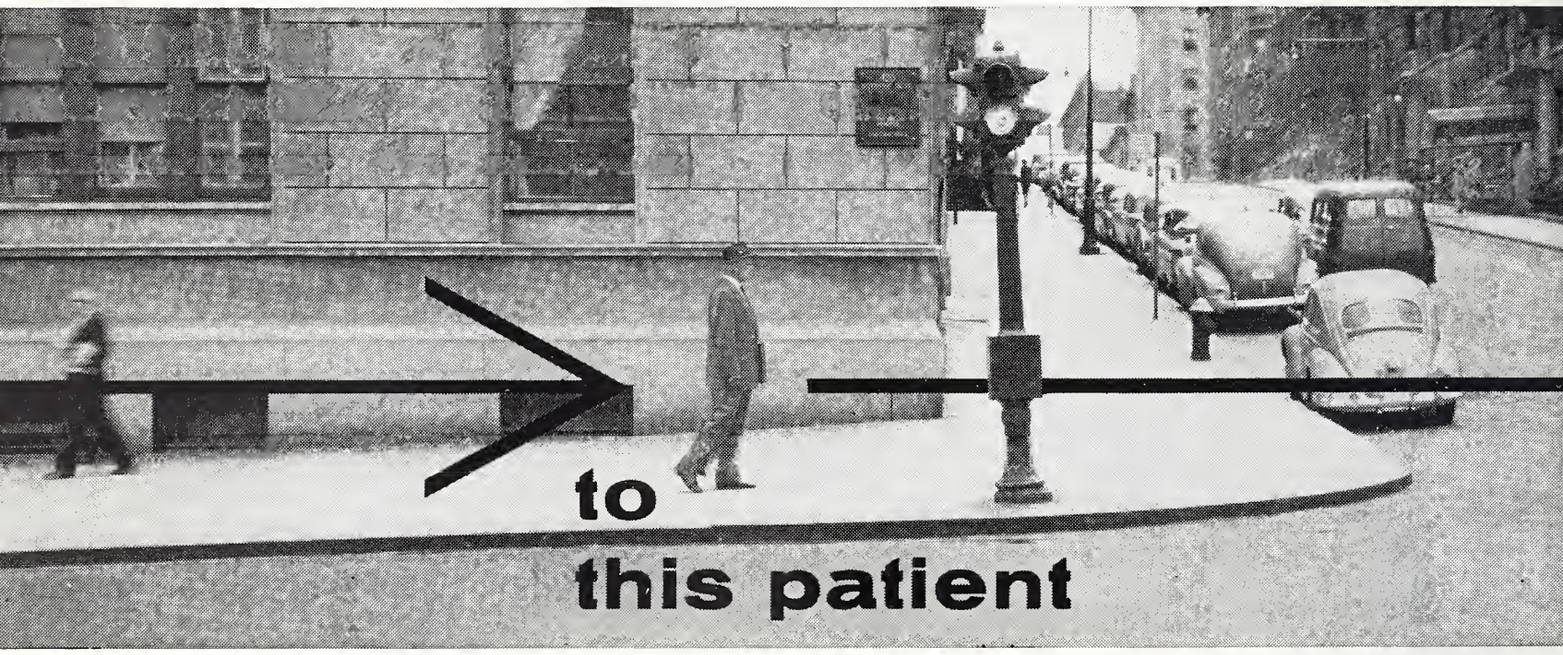
ACP Sets Annual Meet For April 6-10

The American College of Physicians (ACP) has scheduled its 45th annual session in Atlantic City, N. J., April 6-10.

The five days of meetings will include rounds of scientific education aimed at keeping internists abreast of medical development. The College's annual convocation, featuring the induction of 400 physicians to Fellowship in the College and the conferring of three Masterships and 10 Corresponding Fellowships to physicians of other countries, will be held Thursday evening, April 9, in Convention Hall.

Another highlight of the annual meeting will be the presentation of ACP annual awards to men of distinction in various fields of medical science.

The scientific portions of the meeting will cover topics ranging from gastrointestinal disorders and the diagnosis and treatment of heart diseases to



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ISMS Conducts Soft Water Study

A research team of nationally recognized scientists has concluded that there is no supportive evidence to link soft water as a cause in cardiovascular disease. Contrary speculations of a causal relationship between soft water and heart ailments were branded by the committee as unfounded.

The study was undertaken under the auspices of the Educational and Scientific Foundation of the Illinois State Medical Society (ISMS). Its findings are disclosed in the *Illinois Medical Journal.*

The purpose of the "water study" was to determine the validity of widely publicized suggestions—attributed to respected sources in health and education—that soft water is a detrimental factor in diseases of the heart and arteries.

The final evaluation of the group was based on published scientific studies and on the expert knowledge and broad scientific experience of the panel members. Specialists in the group represented the fields of cardiovascular disease, water engineering, epidemiology, medical nutrition, biochemistry and public health.

AHA Schedules 1964 Scientific Sessions

The American Heart Association has scheduled its annual Scientific Sessions for Oct. 23-25 in Convention Hall, Atlantic City, N. J. Deadline for submitting abstracts of papers for presentation is May 15, 1964.

Papers intended for presentation should be based on original investigations in, or related to, the cardiovascular field. Abstracts of papers must be limited to 250 words.

The Scientific Sessions are held in conjunction with the Association's Annual Meeting which will continue through Oct. 27 in Atlantic City. Further information concerning the meetings may be obtained from H. Douglas Chisholm, American Heart Association, 44 East 23rd St., N. Y. C.

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[1]**Sollmann's Manual of Pharmacology,** 8th ed., 1957, p. 507.
[2]**Modern Drug Encyclopedia,** 7th ed., 1958, p. 757.

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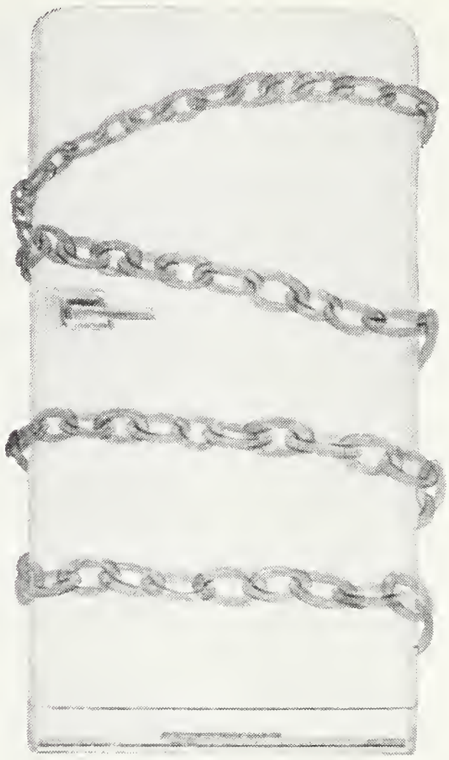

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MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Meeting, June 21-25, 1964, San Francisco, Calif. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn, Chicago 10, Ill.

American Academy of General Practice, April 11-16, 1964, Atlantic City, N. J. Mr. Mac F. Cahal, Volker Blvd. at Brookside, Kansas City 12, Mo.

American College of Surgeons, Clinical Congress, Oct. 5-9, 1964, Chicago. Samuel P. Harbison, Secretary, 40 East Erie, Chicago 11, Ill.

Southern Medical Association, Nov. 16-19, 1964, Memphis, Tenn. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 11-14, 1964, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday January, First Wednesday March, May, July, September, November. Charles D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. Robert B. Townes, Jr., 1196 Mound St., Grenada, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. S. Jay McDuffie, Nettleton, Secretary.

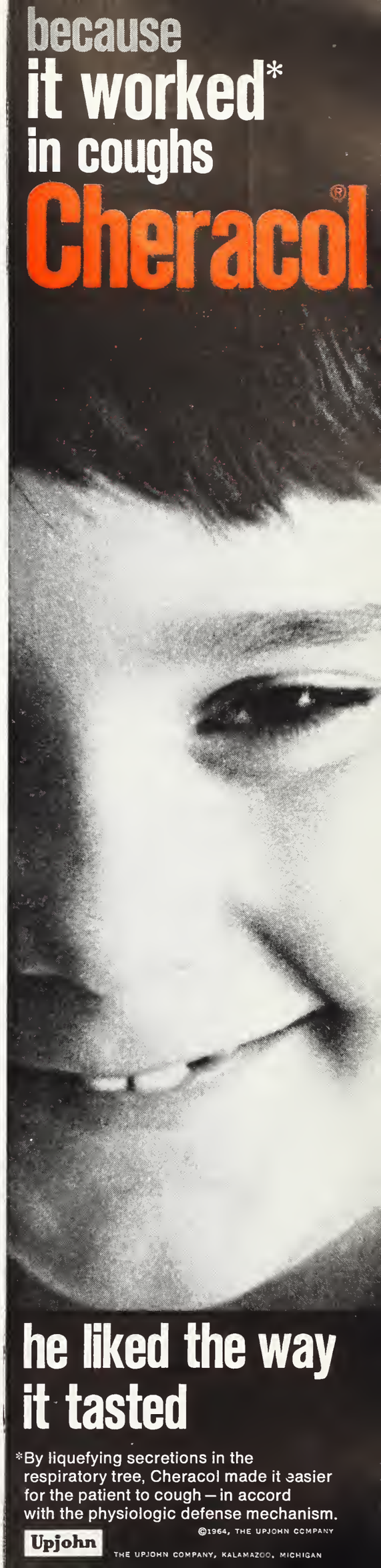
North Mississippi Medical Society, First Thursday April and October, Oxford. Vernon B. Harrison, P. O. Box 36, University, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucien Olen Crosby Memorial Hospital, Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.



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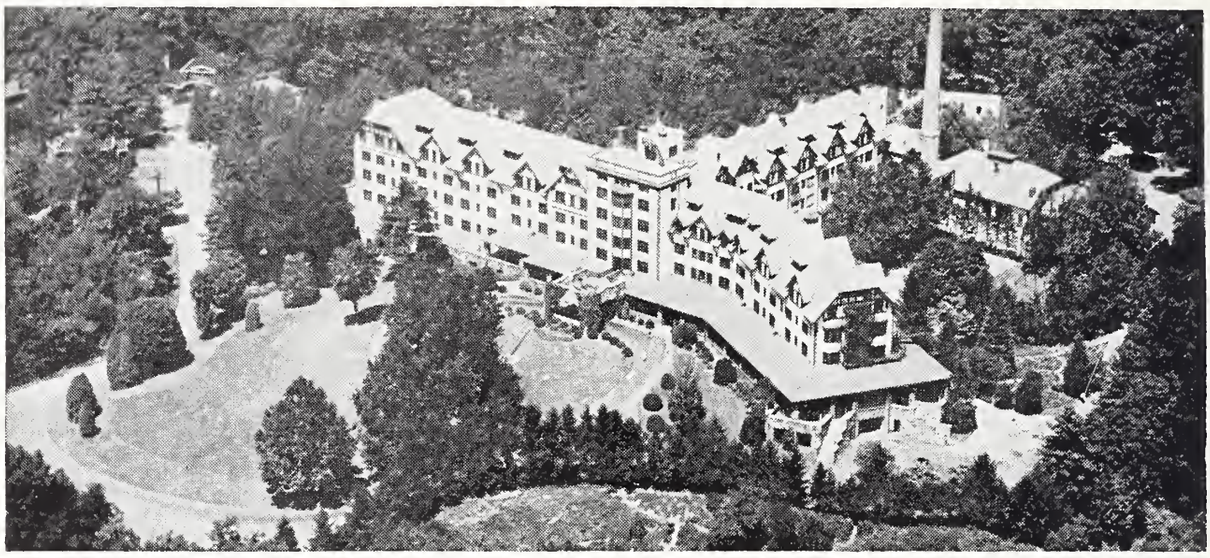

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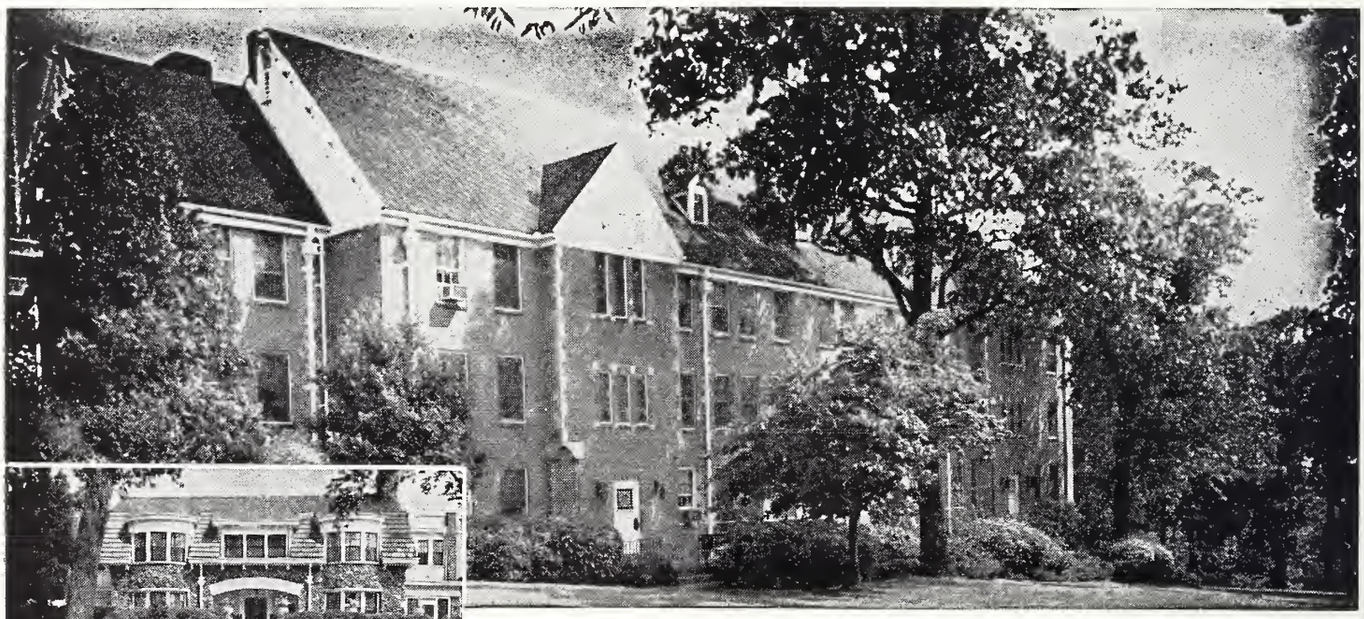

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Volume V
Number 4
April 1964

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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

April 1964

Dear Doctor:

Despite the worldwide decline in maternal mortality, obstetrical deaths directly related to abortion are rising. Biostatisticians say that 10 per cent of deaths are now in this category with rates at 24 per cent in Australia, 20.4 in Switzerland, and 18.1 in England and Wales.

> Overall maternal mortality has dramatically declined in Mississippi, according to Committee on Maternal and Child Care. At the 96th Annual Session next month, committee will report drop of 36 per cent during 1957-61. Obstetrical deaths in state are down from 75 in 1957 to 48 in 1961.

The Black Muslims claim they are curing narcotism among their numbers, according to National Association for Prevention of Narcotic Addiction. NAPAN says Malcolm X, who recently announced disenchantment with movement to form his own organization, reportedly said he was former addict who kicked the habit in 24 hours while in jail.

International political observers say that exodus of scientists from Great Britain will be a key issue in upcoming general elections. Compounding problems of physicians' leaving, medical researchers are jetting away to greener pastures, usually the U.S.A. Entire department of physiology - nine men - left Birmingham University for U.S. last month. Britain lost 12 per cent of its Ph.D.'s in 1963.

Senate Subcommittee on Antitrust and Monopoly, the old Kefauver committee, is zeroing in again on physicians and drug makers. Coming soon will be hearings to see if physician ownership or financial interests in pharmacies, drug manufacture, and repackaging firms constitute "incipient monopoly." AMA ruled repacking interests are unethical but does not prohibit pharmacy ownership by doctors.

Stanford researchers have succeeded in programming neuroses into a computer to study the techniques of psychotherapy. The jittery machine responds to input of "therapeutic data" with episodes of anxiety attacks and even blocks and avoids treatment. Although experimental, possibilities suggest that psychotherapeutic approaches can be tested in minutes where such would require years with patients.

Sincerely,

Rowland B. Kennedy
Executive Secretary

Supreme Court Tacitly Upholds Hill-Burton Edict

Washington - The U.S. Supreme Court refused to review the action of the 4th Circuit Court of Appeals striking down the "separate but equal" concept embodied in Hill-Burton hospital grants. Effect may be profound, legal authorities say, not only in existing hospitals which were built with help of federal funds but also on pending legislation to extend Hill-Burton Act and increase appropriations. About 70 Mississippi hospitals have received such funds.

New York Blue Cross Seeks Rate Hikes

New York - The Blue Cross plan serving New York City and 12 adjacent counties has petitioned for a two year, two stage rate increase of 35 per cent to meet losses it is sustaining. Plan paid out $17 million more than it took in during 1963 from its 7.4 million subscribers. Biggest reason for higher hospital costs is zooming labor rates. Audit records show payroll increases in New York hospitals of $90 million in last three years.

Feds Ask Medical Association Support Against Moonshiners

Atlanta - The southern regional commissioner of Internal Revenue has appealed to state medical associations to help fight moonshiners. Latest "packaging" change is to put mountain dew in one gallon jugs, a switch from the old mason jars. IRS says that "not only is moonshine a serious health hazard, it also deprives our government of taxes," lamenting loudly that "each jug is a tax loss of $10.50." Request couldn't possibly apply to Mississippi which is legally dry.

Senate Committee Holds Hearings On Quackery

Washington - The Senate Special Committee on Aging conducted hearings on quackery, receiving testimony from AMA, pharmaceutical industry, U.S. Postal Service, and Food and Drug Administration. Although considering no specific legislation, committee is expected to sponsor laws to tighten up enforcement of mail fraud quackery, nostrums, and worthless gadgets. Irony is that FDA has extensive authority over ethical drugs but only recourse to suit against nostrums.

Legacy For 'Chiropractic Research' Is Set Aside By Texas Court

Austin - A Texas appellate court ruled that a clinic-hospital for "chiropractic research" violated laws of the state and set aside that portion of a will through which funds for the project were to be provided. Interesting aspect of case is that, while chiropractic is legal in Texas, court held that "research" project would violate civil and criminal laws and be contrary to public policy. Citation is Wilson v. Smith, 373 S.W. 2d 514 (Tex., Nov. 13, 1963).

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Health Congress Set For May 1-2

A national Congress on Environmental Health Problems scheduled for May 1-2, at the Sheraton Hotel in Chicago, will deal with the physician's role in evaluating and preventing environmental health problems, according to Dr. Raymond L. White, director of AMA's Division of Environmental Medicine and Medical Services.

Dr. White announced a five-fold objective for the Congress which included evaluation of environmental influences as contributing factors to disease; providing medical leadership in prevention programs; reducing environmental stresses; controlling air and water pollutants, and promoting local planning.

The Congress will be held under the auspices of AMA's Committee on Environmental Health, with Dr. James H. Sterner, Rochester, N. Y., as chairman.

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Heart Association Offers Award In Research

The American Heart Association is now accepting applications for its 1964-65 Associate in Research in Medical Education award.

Designed to stimulate careers in the field of postgraduate medical education, the program includes training in a medical school's department of research in medical education and participation in pilot projects in continuing education being undertaken by the Heart Association.

Applicants for the award must hold an M.D., Ph.D., Sc.D. degree or its equivalent, and must be a citizen of the U. S. or Canada. To meet the needs of candidates drawn from varied backgrounds and experience, the stipend will be determined when applications are reviewed.

Applications may be made through the Director of Medical Education of the American Heart Association.

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JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
April 1964, Vol. V, No. 4

ORIGINAL PAPERS

Resection of Abdominal Aortic Aneurysms

JAMES D. HARDY, M.D.
Jackson, Mississippi

The author presents an analysis of 43 consecutive cases of abdominal aortic aneurysm in which resection was performed without mortality, renal damage, or limb necrosis. He discusses clinical data, operative technique, and postoperative management.

THE EXCISION OF ANEURYSMS[1] is now commonplace. Yet many physicians still procrastinate in advising surgery for these hazardous lesions, apparently due to a belief that the operative mortality rate is still high and that renal failure or amputation for gangrene is commonly precipitated. The purpose of this report is to present a consecutive and continuing personal series of 43 patients whose unruptured abdominal aortic aneurysms were resected without mortality, renal damage, or limb necrosis. The ages ranged from 46 to 85, the average being 64 years (Figure 1).

CLINICAL DATA

How Aneurysm Was Discovered. The individual aneurysms were discovered in a variety of ways (Table 1). Many lean patients had themselves noted the pulsating abdominal mass, or it had been noted on routine physical examination. In obese subjects the aneurysm had often been detected when an abdominal x-ray had been performed for one purpose or another, as for gastrointestinal studies or for intravenous pyelograms. Occasionally, an abdominal roentgenogram had been taken because the patient had pain, and the outline of the calcified wall of the aneurysm thus disclosed. In other instances the aneurysm was found when the patient was being studied for ischemic disease of the lower extremities or in the course of a work-up for hypertension of possible renal origin. Still other aneurysms were found unexpectedly at operation for some other lesion.

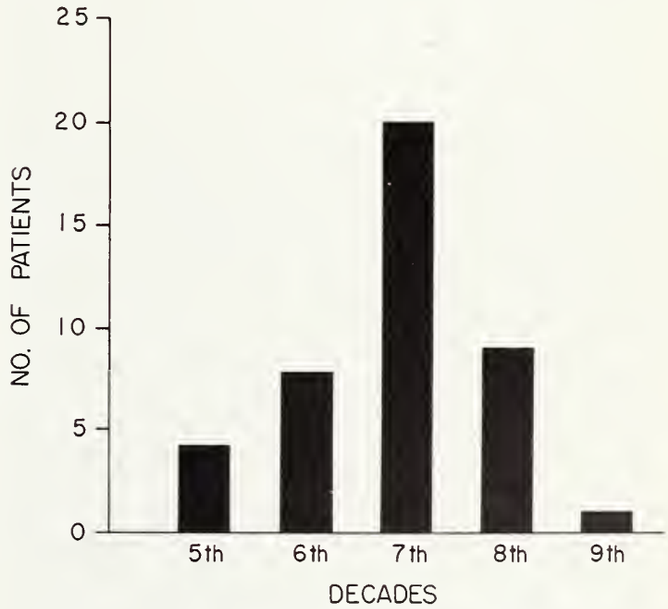

Figure 1. Age Distribution. Many of the 43 consecutive patients whose unruptured abdominal aortic aneurysm was resected uneventfully were in their sixties, but some were in the forties, and one was 85.

From the Department of Surgery, University of Mississippi School of Medicine.

Signs and Symptoms. The individual aneurysms were associated with a wide range of clinical findings, but pain in the abdomen, flank, or back was the most common symptom of importance. However, abdominal pain associated with the presence of an aneurysm was not always due to the aneurysm. Intestinal obstruction, carcinoma of the prostate with spine metastasis, urinary or biliary calculi, or still other causes of pain may exist concomitantly with an aneurysm of the abdominal aorta. Thus the possible causes of the abdominal pain must be carefully analyzed. Even a small aneurysm may precipitate pain through arterial thrombosis, dissection, or rupture—as will be described subsequently.

Associated Arterial Disease. One of the most important points to be emphasized is that the patient with an abdominal aortic aneurysm will very commonly have already developed serious complications of atherosclerosis which involve other organs (Table 2). Approximately one-third of the patients had a normal electrocardiogram, another third had an abnormal electrocardiogram but without definite evidence of myocardial infarction, and approximately one-third had already experienced one or more episodes of frank myocardial infarction. If the patient had not had a recent episode of myocardial infarction, effort angina was not considered a contraindication to resection of a threatening aneurysm. Of the 43 patients, six had had a previous episode of hemiplegia and 21 had leg ischemia sufficiently severe to produce intermittent claudication. Only one patient had severe hypertension, and this was improved following revascularization of the left kidney at the time the aortic aneurysm was resected. Ischemia of the legs was likewise corrected in the course of resecting the aneurysm. On two occasions cerebral symptoms prompted preliminary carotid arteriograms, but significant occlusive disease was not disclosed and the abdominal aortic aneurysm was then resected uneventfully.

TABLE 1

PRINCIPAL PREOPERATIVE SIGN OR SYMPTOM

Intermittent Claudication	4
Abdominal Pain	16
Pulsating Lump in Abdomen	5
Pain in Flank and Back	2
Back Pain & Intermittent Claudication	3
Epigastric Pain with Mass	1
Discomfort in Abdomen	1
Abdominal Pain & Intermittent Claudication	3
Mass in Abdomen	1
Abdominal Pain & Tenderness	1
Leg Ischemia & Renal Ischemia	1
Leg Ischemia	2
None	3
	43

Thus, it is apparent that most patients who are in the age group in which abdominal aortic aneurysms are likely to occur will often have developed widespread atherosclerotic disease of important arteries. Nevertheless, if the lungs are well ventilated and hypotension is avoided during surgery, such patients withstand excision of the aneurysm exceedingly well.

The Routine Preoperative Studies. In addition to the history and physical examination, which included a search for associated atherosclerotic disease involving the brain, heart, kidneys, and extremities, a blood count, urinalysis, electrocardiogram, and determination of the blood urea nitrogen and fasting blood sugar levels were performed. The extent of the aneurysm was estimated from posterior-anterior and lateral roentgenograms of the abdomen. An aortogram was not routinely performed, but was elected if there was reason to suspect occlusion of a renal artery, as reflected in hypertension or the presence of a bruit, or if evidence of ischemia of the lower extremities existed. In other words, if excellent femoral pulses were present and the abdominal aneurysm was clearly palpable even in the obese subject, the aortogram was omitted—though femoral arteriograms were at times performed on the operating table.

The presence of a moderately elevated blood urea nitrogen level was not considered to be a categoric contraindication to operation, though it did prompt further evaluation of renal reserve. Thus the existence of an abdominal aortic aneurysm larger than 6 to 8 cm. in diameter was con-

TABLE 2

ASSOCIATED CARDIOVASCULAR PATHOLOGY

ELECTROCARDIOGRAM	
Normal	18
Abnormal	12
Infarction	13
ANGINA	7
PREVIOUS STROKE	6
HYPERTENSION (Systolic above 140, diastolic above 90)	
Moderate	18
Marked	2
Borderline	1
Nonhypertensive	22
LEG ISCHEMIA	21

sidered a sufficient indication to justify a certain operative risk in achieving its resection.

Immediately preceding operation a Foley indwelling catheter was usually inserted into the bladder to keep this organ decompressed during the course of the operation, and a nasogastric tube was passed to effect gastric decompression during operation and for several days into the postoperative period.

THE OPERATION

In looking back upon our early experience with resection of abdominal aortic aneurysms, it is at once apparent that the smooth operative and postoperative courses of patients operated upon at the present time result from many factors. The most important of these factors is the precise and expeditious conduct of the operation itself, with minimal time on the operating table and with limited blood loss and replacement. The use of Halothane or some other nonexplosive anesthetic agent, permitting electric coagulation of small bleeders, expedites the procedure. A good technical result presages a smooth postoperative course.

Operative Technique. A long abdominal midline incision is routinely employed (Figure 2). Following an exploration of the other organs in the abdomen, including the upper abdominal aorta with palpation of the renal arteries if these are not to be further examined, the small bowel is retracted to the right and placed in a Lahey rubber bag outside the abdomen. Next the posterior peritoneum is incised and the upper portion of the aneurysm exposed just below the renal arteries. A Satinsky or other suitable clamp is placed in position across the aorta above the aneurysm but not closed down at this time. The pressures in the renal arteries are now measured, if indicated, and renal revascularization performed if necessary (Figure 3).

The common iliac arteries are also exposed, but these vessels need not be separated from the underlying iliac veins unless these arteries are themselves aneurysmal. The back pressure in these vessels will be low and a noncrushing clamp applied vertically will suffice to prevent bleeding after the aneurysm is divided, assuming that lumbar arteries are controlled. Even if the iliac arteries are involved by the aneurysm, they are more readily freed from the iliac veins after the aneurysm has been divided (Figure 2). After the inferior mesenteric artery has been doubly ligated and divided, the aortic clamp above the aneurysm but below the renal arteries is occluded and 10 mg. of heparin are injected into the aneurysm to minimize the possibility of vascular thrombosis in the legs during excision of the aneurysm.

The iliac arteries are next occluded, and the aneurysm is entered in one of several ways. If the aneurysm is of moderate size, blood loss is reduced by cross-clamping the aneurysm with long Kocher hemostats about 3 cm. above the aortic bifurcation and then dividing the aneurysm between these two clamps. If this technique is employed, it will be necessary to dissect a short portion of the inferior vena cava away from the aneurysm so that the clamps can be placed without injury to the vena cava. If the aneurysm is large, the use of such clamps is not feasible. In this instance one boldly incises the aneurysm in a vertical direction (Figure 4), quickly removes the clot, and then oversews the lumbar arteries as the unroofing of the aneurysm proceeds. No effort is made in this instance to dissect the sac of the aneurysm off the vena cava. As one proceeds cephalad, the vena cava veers slightly away from the aorta, and it is usually a simple matter to separate the vena cava from the aorta at the level of the renal arteries. The technique of placing the long Kocher hemostats across the aneurysm permits one to clamp the lumbar arteries from behind the aneurysm as the dissection is carried progressively upward. In this way the pressure within the aneurysm limits the amount of blood that can be lost until the lumbar arteries are successively exposed, clamped, and divided. However, in many instances many or most of these lumbar arteries have already become occluded by thrombus.

When the aneurysm has been dissected upward to a point at which the aorta has returned to a normal diameter, the aneurysm is excised and the prosthesis is sutured in place with 3-0 arterial silk. The posterior row of sutures is placed first, since this row can be placed more readily while exposure and morbility of the prosthesis are unimpaired. A thick bite of the aorta as well as of the graft is taken, and we have virtually never had postoperative hemorrhage from an anastomotic suture line. Once the posterior row of sutures has been laid with the distal end of the graft retracted cephalad, it is lowered into the depths of the wound and placed parallel to and against the spinal column, and the anterior row of sutures is then similarly placed in a continuous manner. It will have been advisable to determine whether spine erosion by the aneurysm has produced sharp bony spicules that could erode the graft postoperatively. If these are present, a portion of the saccular aneurysm should be employed to protect the prosthesis posteriorly (Figure 4), just as other tissue must be used to cover the prosthesis anteriorly so that the intestine will not lie immediately

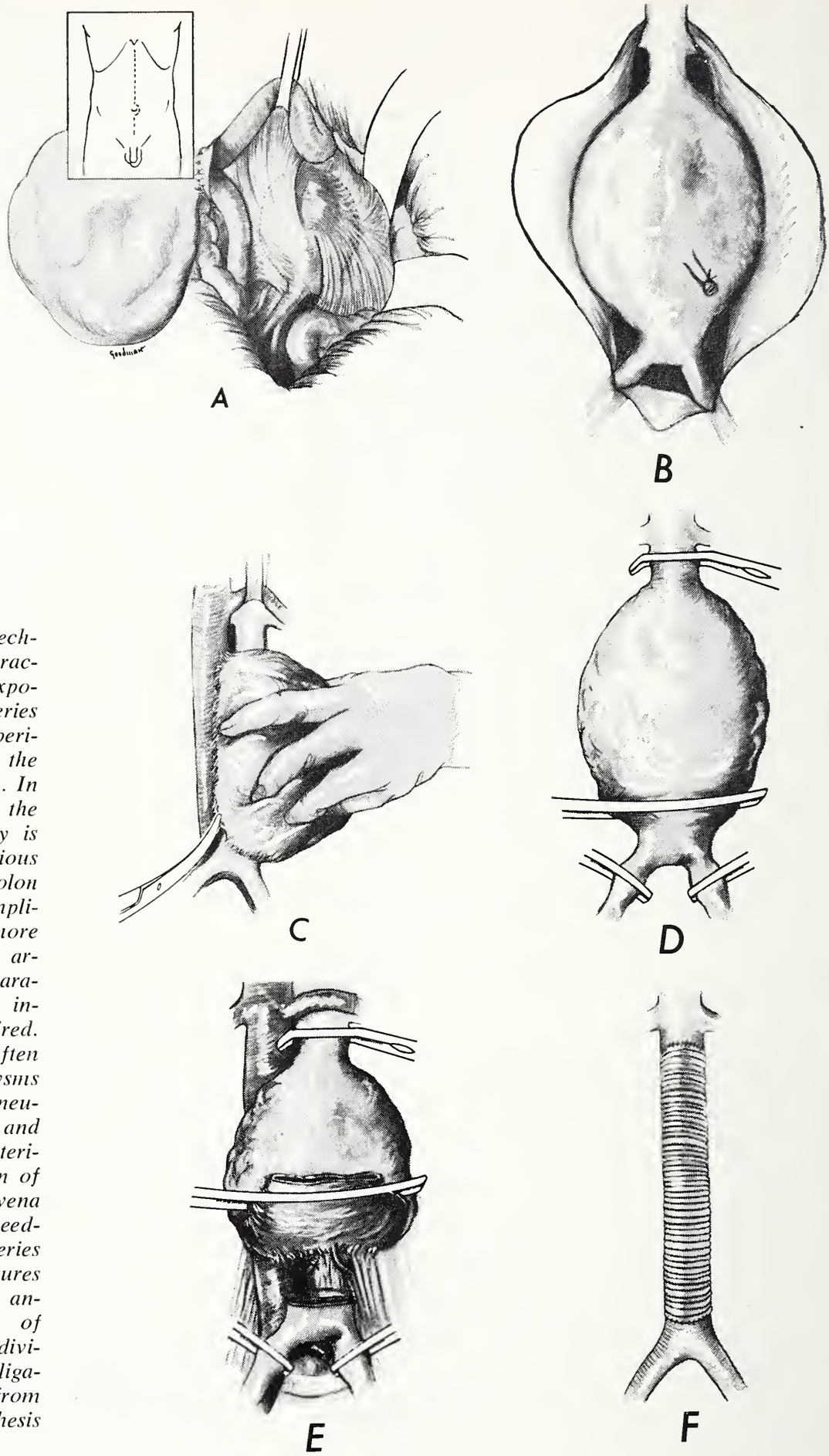

Figure 2. Operative Technic. A. Incision and retraction small bowel. B. Exposure of renal and iliac arteries by incising the posterior peritoneum and division of the inferior mesenteric artery. In rare instances division of the inferior mesenteric artery is not tolerated and serious ischemia of the sigmoid colon is precipitated. This complication is rendered much more likely if the hypogastric arteries are ligated. C. Separation of aneurysm from inferior vena cava, if desired. This is feasible and often convenient with aneurysms of moderate size. Large aneurysms are more safely and expeditiously opened anteriorly (Figure 4), a portion of the sac being left on the vena cava and ureters, and bleeding from the lumbar arteries is controlled with sutures placed from within the aneurysm. D. Application of clamps. E. Technic of division of aneurysm with ligation of lumbar arteries from behind. F. Fabric prosthesis inserted.

against the prosthesis. When the superior anastomosis has been completed, using either a teflon or a dacron prosthesis, we usually allow a small amount of blood to flow into the graft so that it will have been preclotted. The residual blood is then aspirated. Care is exercised throughout to avoid displacing thrombotic material from the aorta into the renal arteries.

Attention is now turned to the lower portion of the aneurysm and to the aortic bifurcation. Frequently it is necessary, after excising the remainder of the aneurysm below, to perform thrombectomy or thromboendarterectomy upon the common iliac arteries. It may be necessary to perform a bypass to the leg (Figure 5), or to use a bifurcation aortic replacement instead of a tube aortic replacement. These decisions will usually have been made before the aneurysm was divided, since at this time it would have been necessary to choose the proper type of prosthetic replacement. Operative arteriography is employed when indicated.

The anastomoses below are performed in a manner similar to that used above. The chance of injuring the ureters is slight in most instances, but if doubt exists as to whether or not a ureter is present in a given mass of tissue that is to be divided, this point is settled conclusively before proceeding further. As a rule the ureters are readily retracted with Deaver or other suitable retractors as they cross the iliac arteries just above each iliac bifurcation.

The clamp on each iliac artery is opened briefly just prior to the completion of the anastomoses below. Good back-bleeding insures that clotting has not occurred distal to the clamp during the time that the aorta has been occluded.

When the anastomoses have been completed, the anesthesiologist is reminded that the clamps are to be released, which is done slowly to avoid abrupt pooling of blood in the legs with a fall in blood pressure that might precipitate a cerebrovascular accident or myocardial infarction.

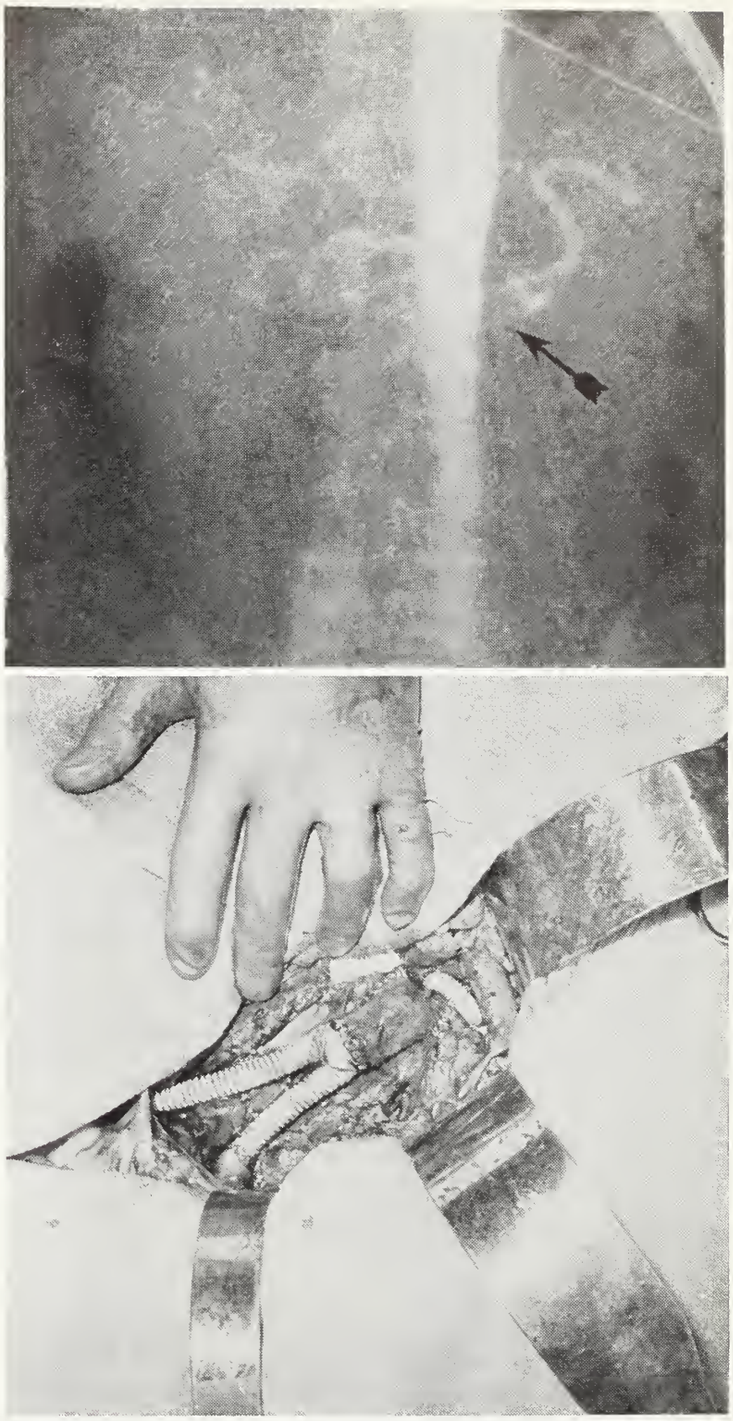

Figure 3. Renal Revascularization and Resection of Aortic Aneurysm. Above. Aortogram exhibiting severe stenosis of left renal artery in markedly hypertensive patient. Aneurysm of lower aorta was not adequately opacified in this projection. Below. Bypass graft from aorta to left renal artery, and bifurcation graft to replace aneurysm involving terminal aorta and common iliac arteries.

The existence of hypogastric aneurysms (Figure 6) may complicate the completion of the lower anastomoses. Our procedure has been to excise as much of the hypogastric aneurysm as feasible and then to oversew the stump, the limbs of the bifurcation graft being joined to the external iliac arteries as indicated. No complications have resulted from such management of the hypogastric aneurysms. Significant aneurysms of the common or of the external iliac artery are excised.

In the absence of known drug sensitivity, penicillin and streptomycin are routinely placed around the prosthesis, prior to the closure of the posterior peritoneum and adjacent tissue with a

continuous suture of chromic catgut. The interposition of tissue between the prosthesis and the small bowel is an important consideration. If this is not done, the intestine may become adherent to the graft and gradual erosion may result in aorto-enteric fistula. In two patients of this series the posterior wall of the small bowel was represented by the anterior wall of the aneurysm. However, in neither case had a complete fistula resulted. Every precaution is exercised to avoid intraperitoneal contamination in the course of the operation, since infection around the prosthesis may result in fatal hemorrhage. Fortunately, no infection of the graft occurred in this series of 43 patients. In addition to the antibiotics inserted around the prosthesis at the time of operation, postoperative antibiotics have been used routinely. Penicillin and streptomycin have been agents of choice, though tetracycline has been used when the patient was sensitive to penicillin.

With the exception of the 10 mg. of heparin which was injected into the aneurysms just after the superior clamp has been applied, heparinization has rarely been employed. The only times it has been used otherwise were situations in which associated operations were performed in the leg for ischemia.

Associated Visceral Disease. A number of patients had associated disease, such as gallstones or hiatal hernia. Whether or not an associated pathologic condition was corrected after the aneurysm had been excised was dictated by the urgency of the other lesion. As a rule, only those lesions were corrected which did not involve opening the biliary or the alimentary tract, but occasionally even operations upon the alimentary tract were employed because it was clear that under the circumstances which existed the postoperative period would be rendered less hazardous by correction of the pathology that was found. No complications occurred as a result of the occasional associated biliary tract or gastrointestinal procedures.

UNEXPECTED CONDITIONS

The unanticipated nature of certain lesions encountered constituted one of the more interesting aspects of this series of cases.

Erosion of the Jejunum. While no frank aorto-enteric fistula was encountered, complete replacement of the posterior wall of a segment of the proximal jejunum by the aneurysm was found in two patients, as noted above. Since the wall of the aneurysm itself was still intact, no bleeding into the intestine had occurred. In both instances it was possible to obtain a good transverse closure of the intestine at this point without the necessity of resecting the entire full-thickness of the bowel. Despite the mild contamination which occurred at the time the gut was dissected free of the aneurysm, no infection or other complication developed postoperatively.

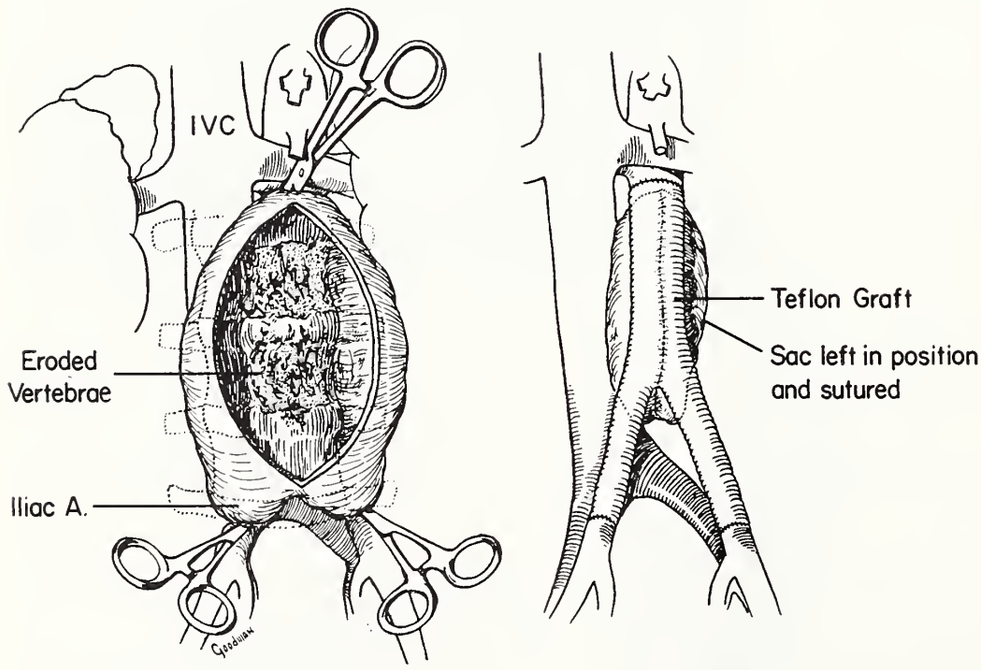

Figure 4. Technic of Incision Through Anterior Wall of Large Aneurysm. Use of portion of aneurysm sac to protect prosthesis from bone spicules of eroded spine.

Severe Abdominal Pain with Aneurysms of Small to Moderate Size. Severe pain prompted the exploration of the abdomen in two patients whose aneurysms were of modest size. In one patient recent *thrombosis of the inferior mesenteric artery* was disclosed. This man gave the history of having experienced severe pain across the lower abdomen 48 hours prior to admission, which led to the discovery of the aneurysm by his physician and to his prompt referral to the University Hospital. The pain had slowly subsided over a period of several hours, and thereafter had not recurred. It appeared likely that abrupt occlusion of the in-

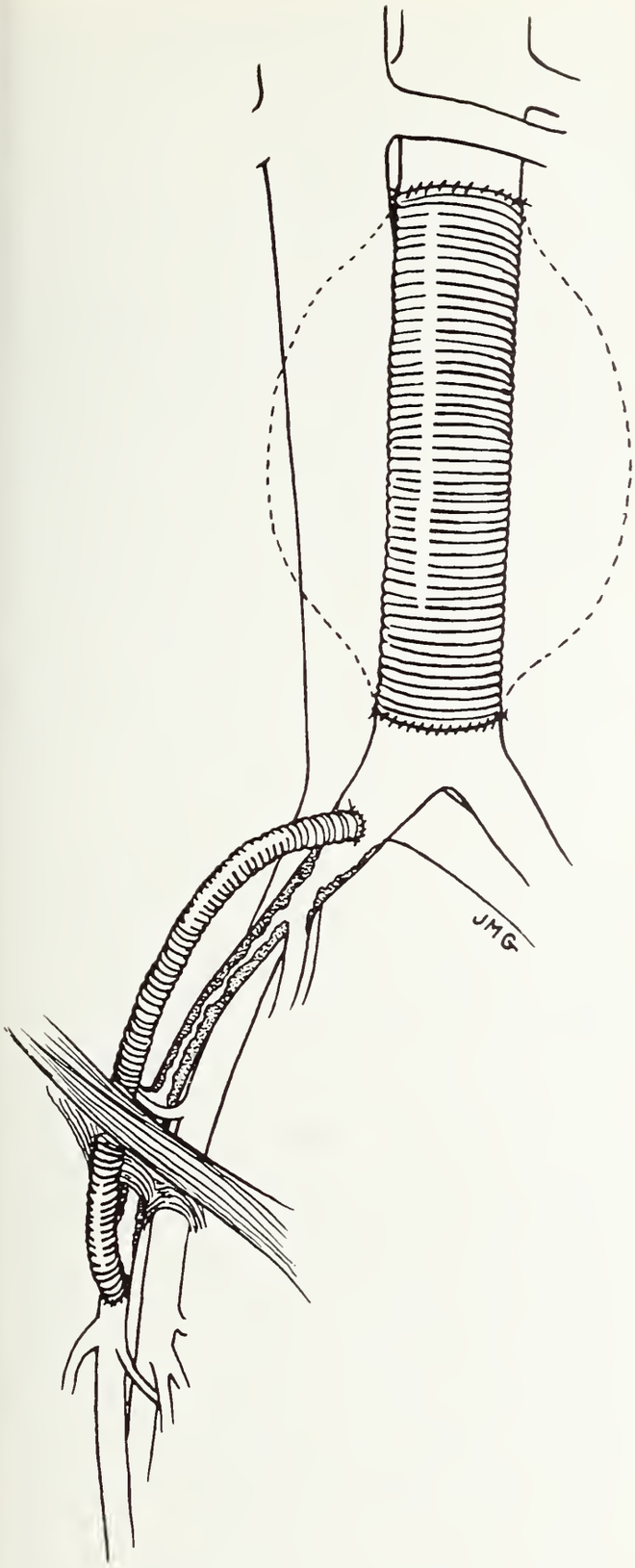

Figure 5. Example of Associated Arterial Pathology. Following replacement of the aneurysm with a fabric prosthesis, the blood flow through the right external iliac artery was subnormal and endarterectomy was not feasible. The long stenosed segment was bypassed with a fabric prosthesis which extended from the right common iliac artery to the common femoral artery.

ferior mesenteric artery had produced a temporary ischemia of the colon which was gradually improved by the collateral circulation. At the time of operation there was no indication that serious continuing ischemia of the colon existed. Undoubtedly many undiagnosed episodes of abdominal pain are due to arterial occlusive disease that is not sufficiently severe to precipitate intestinal necrosis.

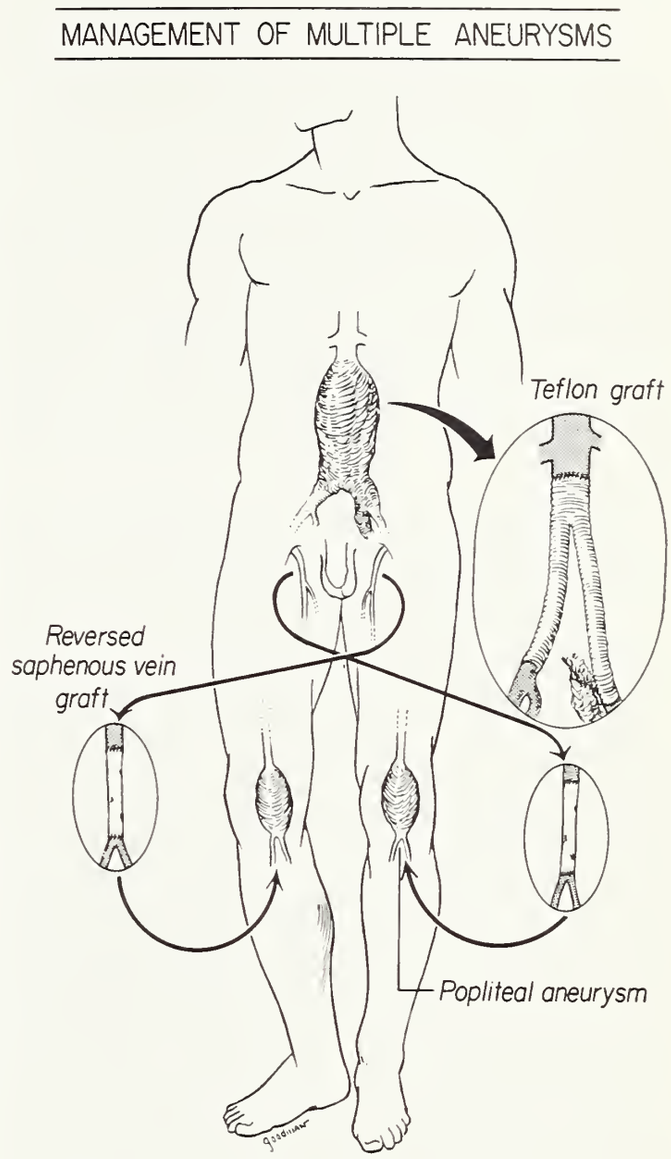

Figure 6. Resection of Bilateral Popliteal Aneurysms and Abdominal Aortic Aneurysm. The patient was admitted for severe ischemia of the left leg precipitated by abrupt thrombosis of the left popliteal aneurysm. One week following resection of this lesion the large abdominal aortic aneurysm was resected. A few weeks later the right popliteal aneurysm was also replaced with a saphenous vein graft.

In another patient with a small aneurysm the pain was so severe that the abdomen was explored and a dissecting aneurysm was discovered. The

aneurysm was somewhat larger than it had been judged to be preoperatively, but the point of special interest was that the hematoma was entirely in the anterior wall of the true aneurysm. When the aorta was divided distal to the upper clamp, the dissection was found to extend above the level at which this clamp has been applied; thus the clamp was advanced cephalad and reapplied just below the right renal artery. Even so, although no hematoma could be palpated in the wall of the aorta above the renal arteries, one could not clearly discern the upper limit of the dissection. This lesion was then managed by excising a portion of the inner wall of the aneurysm anteriorly, the prosthesis being sutured to the remaining outer wall of the aorta above so that a "window" for the entry of the blood was provided, should further blood course from above through the preformed channel.[2]

The use of this technique of management appeared to represent better judgment than to risk renal failure through division of the renal arteries in order to insert a longer prosthesis.

Abrupt Occlusion of Abdominal Aorta with Severe Leg Ischemia. A patient was referred for severe ischemia of both legs which had developed abruptly on the preceding day. No femoral pulses were palpable, and the abdomen was explored. It was found that this obese man harbored an aneurysm approximately 6 cm. in diameter, the channel of which had become completely occluded to produce the ischemia of the lower extremities. The aneurysm was excised, thromboendarterectomy performed on the iliac arteries, and femoral pulses were restored with good arterial perfusion of the legs.

Asymptomatic Rupture of Aneurysm. In one patient an aneurysm of moderate size (6-7 cm. diameter) was found to have ruptured and sealed off at some time previously, though the patient did not recall having had pain with this lesion. The hemorrhage had occurred at the lower portion of the aneurysm just adjacent to the origin of the left common iliac artery.

Ureteral Injury and Colon Necrosis: Autotransplantation of Kidney and Resection of Necrotic Intestine. In the course of resecting a large aneurysmal homograft which had been inserted six years previously, the right ureter was severed inadvertently as it ran through the wall of the aneurysm posteriorly. At the initial operation the ureters had been dropped behind the prosthesis, instead of running across the iliac arteries as they normally do. Unaware of this situation, one considered that the retraction of the tissue overlying the iliac arteries would be sufficient to protect the ureters at this level, as it ordinarily would, along with the other usual precautions. When the ureteral injury was discovered, the patient was operated upon again and the ureter anastomosed over a small T-tube. Unfortunately, a stricture followed and eventually the right kidney was transplanted to the right pelvis, the renal artery being anastomosed to the external iliac artery and the renal vein to the external iliac vein.[3] From this position the ureter, which was 7 cm. in length instead of the normal 22 to 25 cm., was readily implanted into the bladder. This patient has remained well for one year, and the function of the transplanted kidney remains satisfactory. Incidentally, unavoidable encroachment upon the right hypogastric artery, along with sacrifice of the inferior mesenteric artery at the original operation six years earlier, resulted in necrosis of a short segment of the sigmoid colon. This segment was excised, and a colostomy was performed which was closed uneventfully some weeks later.

Although this was the only instance of colon necrosis in this series, we have observed in other patients evidence of colon ischemia ranging from mild diarrhea, to bloody diarrhea with the shedding of the mucosa of the colon, to actual necrosis of the colon which necessitated reoperation as it did in this instance. The hypogastric arteries should be preserved whenever possible.

POSTOPERATIVE MANAGEMENT

The postoperative management of the patient who has undergone resection of an abdominal aortic aneurysm is usually smooth if the expeditiously performed operation resulted in good vascularization of viscera and the lower extremities. The blood pressure, pulse rate, respiration, and hourly urine output are recorded, and for a few hours the pulses in the legs are checked frequently to make certain that postoperative occlusion of the arteries to the lower limbs does not develop undetected. The nasogastric tube is connected to suction, antibiotics are continued, and digitalis is given if it was being employed preoperatively. The patient is mobilized on the first or second day postoperatively, and the nasogastric tube is removed as soon as he is passing flatus. Intravenous fluids are given in such volume as needed to replace losses by all routes.

The Urinary Output. Despite the concern expressed in the literature over the causes of oliguria

following cross-clamping of the aorta, we do not believe that a specific problem exists in this connection.* In none of this series of 43 patients was the urinary volume sufficiently low postoperatively to occasion serious concern. Specifically, we do not feel that cross-clamping the aorta for a reasonable period of time carries any specific hazard other than the fact that thrombotic material within this vessel may be displaced into the renal arteries. Needless to say, clamps should be released slowly to prevent excessive pooling of blood in the legs with a fall in blood pressure. Hypotension usually leads to the infusion of more blood, either of which may impair renal integrity. Osmotic diuresis has not been employed in this series of patients, and it is considered unnecessary —quite apart from the question of whether or not it is clearly beneficial in any situation.

There was a mild rise in the blood urea nitrogen level in certain of these patients, but in no instance did it exceed 50 mg. per cent. In most patients there was virtually no change in the blood urea nitrogen level postoperatively from that recorded during the preoperative period.

POSTOPERATIVE COMPLICATIONS

Although there were no deaths in this series and no cerebral, myocardial, or renal complications of moment, there were a number of minor complications which will be observed in any group of elderly patients undergoing major operations. One patient had a mild wound infection five days following operation, but this occasioned no delay in his discharge from the hospital. Abdominal distention was encountered in several patients in whom the nasogastric suction was discontinued too soon, and one patient exhibited a urinary tract infection of some significance, perhaps due to the fact that the urinary catheter had been left in place for several days. The instance of colon necrosis and the severed ureter in a patient having a second aortic resection was mentioned previously. One patient exhibited transient hematuria five days postoperatively, but the cause was not determined.

Wound Separation. Two patients sustained wound separation with evisceration, and no type of wound closure employed has protected completely against partial or complete separation of various lengths of these long midline abdominal incisions. In this series of patients the peritoneum was closed with a continuous suture of No. 1 chromic catgut, a number of No. 2 silk retention sutures were placed, and the fascia was closed with interrupted 0 silk.

DISCUSSION

It is to be emphasized that none of these patients was admitted to the hospital with gross rupture of the aneurysm, though in several, mild leakage from the aneurysm had occurred in the recent or remote past. The patient whose aneurysm has ruptured will often have sustained substantial blood loss with consequent hypotension. And further hemorrhage and hypotension are likely to occur before proximal and distal control of the aneurysm has been achieved. The mortality rate for patients admitted with grossly ruptured abdominal aortic aneurysms approaches 40 per cent.

It is useful to speculate upon the factors which are responsible for the very low operative mortality rate associated with the resection of unruptured abdominal aortic aneurysms at the present time. In our view, the single most important factor is that of familiarity with the characteristics of aneurysms as well as operative experience in excising aneurysms. Whereas formerly from four to five hours were required to resect an aneurysm of considerable size, it is now rare that more than two or at most three hours are required for the resection of an aneurysm which does not involve additional complicating factors such as renal or extremity ischemia. Familiarity with the manipulations which may be imposed upon the aneurysm without producing rupture permits the surgeon to operate far more rapidly and boldly than would be the case if he were not so familiar with the lesion. In addition, confidence on the part of the operator that he can control almost any hemorrhage that might occur also gives him considerable freedom in taking short cuts which would not be justified in his early experience with these lesions.

In previous years an effort was made to dissect the vena cava free of the aneurysm throughout the entire length of the aneurysm, with the inevitable result that from time to time injury to the vena cava occurred. This resulted in blood loss while the rent in the vena cava was being repaired, with the need for additional blood transfusion. At the present time a portion of the sac of the aneurysm is left on the vena cava if the two are adherent. And in fact, if the aneurysm is large, it is simply unroofed and a portion of the sac is left on the

* Since the submission of this manuscript, we have encountered a case of transient renal shut-down which did follow cross-clamping of the intrarenal aorta.

vena cava and in the region of the ureters on either side. Another source of hemorrhage is the iliac vein on either side. Formerly the artery and vein were separated from each other and a tape passed around the artery. This resulted from time to time in venous injury with tedious repair and blood loss. At present a suitable instrument, usually a Crafoord clamp, is placed straight down across the common iliac artery, even if a small portion of the vein is occasionally engaged in the most dependent portion of the clamp. The adventitia overlying the vein will protect it from injury, and this suffices to control back bleeding from the iliac artery.

The initial tendency to use 5-0 arterial silk was later replaced by the use of 4-0 arterial silk and still later by the use of 3-0 arterial silk. The larger silk results in much less breakage and permits one to sew more rapidly. In addition, there will arise occasions in which the suture material of larger size is necessary to pass through a calcified plaque and to obtain a secure closure. Furthermore, the larger silk is equipped with a larger needle, which may be required to force passage through the calcified posterior portion of the aorta.

Cardiac and renal failure have been absent in this series of patients, perhaps due to the relatively short operating time and to the small amounts of blood that were used. Whereas five years ago the patient might receive from 3 to 4 liters of blood during the course of resection of a large abdominal aortic aneurysm, it is distinctly uncommon for more than 1500 cc. of blood to be used at the present time, and usually much less than this amount is required.

No apologies are made for the use of antibiotics. It may be that we shall eventually conclude that these prophylactic antibiotics are unnecessary and possibly even harmful. However, the complete absence of serious infection in this series of patients is considered to represent a major factor in the absence of mortality. The development of infection, especially staphylococcal infection around a synthetic or fabric prosthesis is likely to lead to serious hemorrhage and frequently to loss of limb or life.

SUMMARY AND CONCLUSIONS

1. A personal consecutive series of 43 patients who underwent resection of abdominal aortic aneurysms is presented. Ages ranged from 46 to 85 years, and there were no deaths or vascular complications.

2. The aneurysms were variously discovered in the investigation of abdominal or back pain, on routine physical examination, on roentgenograms requested for a variety of reasons, or unexpectedly at laparotomy performed in obese patients for unrelated pathology.

3. Many patients had multiple arterial lesions. For example, approximately one-third exhibited an abnormal electrocardiogram but without clear evidence of previous myocardial infarction and another third had already experienced one or more attacks of myocardial infarction. Of the 43 patients, 6 had had a previous episode of hemiplegia and 21 had leg ischemia sufficiently severe to produce intermittent claudication. Some had aneurysmal involvement of the hypogastric and/or popliteal arteries. Such complications were not usually considered a compelling contraindication to resection of a threatening aneurysm.

4. Unanticipated complications of the aneurysm encountered at operation included intramural dissection, recent thrombosis of the inferior mesenteric artery to explain preoperative pain, erosion of the jejunum, and previous but apparently asymptomatic rupture of the aorta.

5. It is concluded that the hazardous nature of abdominal aortic aneurysms requires that these lesions be resected promptly and that this can be accomplished with a very low mortality rate. ★★★

2500 North State St.

Aided by USPH Grant No. HE-06163.

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THE WELFARE SCENE

The beatnik was explaining his getting on the welfare rolls to his espresso house group: "It's cool aid, man, cool aid."

Maternal Mortality in Mississippi During 1961

MICHAEL NEWTON, M.D.
Jackson, Mississippi

THE FOLLOWING is the fifth report of studies on maternal deaths in Mississippi, conducted by the Committee on Maternal and Child Care of the Council on Medical Service of the Mississippi State Medical Association. Previous reports have covered the years 1957, 1958, 1959, and 1960.

TABLE 1
STUDY MATERIAL

	1960		1961	
	NO.	PER CENT	NO.	PER CENT
Total Cases	58	—	48	—
Replies Received	51	87.9	40	83.3
Replies Usable	49	84.5	37	77.1

Findings for 1961 are now presented. Information has been obtained by the same techniques as before except that greater use has been made of follow-up letters sent by the committee to individual reporting physicians in order to clarify certain points. In giving the results, data for 1961 are compared directly with those for 1960.

TABLE 2
ADEQUACY OF DATA

	1960		1961	
Category	NO.	PER CENT	NO.	PER CENT
5	7	14.3	2	5.4
4	8	16.3	5	13.5
3	8	16.3	9	24.3
2	12	24.5	8	21.6
1	14	28.6	13	35.2

Chairman, Committee on Maternal and Child Care, Council on Medical Service.

RESULTS

In 1961 the lowest number of maternal deaths (48) was reported in Mississippi since the committee's study began in 1957 (Table 1). During these five years the total number of births in the state has not changed appreciably (60,002 in 1961 as compared with 59,731 in 1960 and 61,291 in 1957). The percentage of replies received and usable replies and the quality of the replies all decreased slightly from 1960 (Table 2). The mean adequacy of the replies was 2.35 as compared with 2.63 for 1960. The proportion of direct obstetric deaths (those resulting from the complications of pregnancy itself) remained essentially unchanged at 70 per cent (Table 3),

This report, the fifth on studies of Mississippi maternal deaths, covers data for 1961. The lowest number of maternal deaths was reported for this year than for any since the Committee on Maternal and Child Care began their studies in 1957. A continued decrease in the number of deaths from hemorrhage is observed although those from toxemia and infections remained the same.

TABLE 3
CAUSES OF DEATH

	1960		1961	
	NO.	PER CENT	NO.	PER CENT
Direct Obstetric	35	71.4	26	70.3
Indirect Obstetric	10	20.4	10	27.0
Unrelated	4	8.2	1	2.7

while there was a decrease in the number of women dying from hemorrhage but no change in the number of those dying from toxemia or infection (Table 4). The percentage of avoidable deaths

TABLE 4

CAUSES OF DIRECT OBSTETRIC DEATHS

	1960		*1961*	
Cause	NO.	PER CENT OF ALL DEATHS STUDIED	NO.	PER CENT OF ALL DEATHS STUDIED
Hemorrhage	14	28.6	10	27.0
Toxemia	9	18.4	9	24.3
Infection	6	12.2	6	16.2
Vascular Accidents	2	4.1	—	—
Anesthesia	2	4.1	—	—
Other	2	4.1	1	2.7

(as judged by the committee in the light of ideal circumstances) rose slightly but was still below that for 1957, 1958, and 1959. Avoidable factors were attributed by the committee to the physician in 20 instances, to the hospital in 2, and to the patient in 18. Avoidable factors were identi-

TABLE 5

AVOIDABILITY

	1960		*1961*	
	NO.	PER CENT	NO.	PER CENT
Avoidable	36	73.5	29	78.4
Nonavoidable	8	16.3	7	18.9
Undetermined	5	10.2	1	2.7

fied in all three of these areas in one case, in two areas in 11 cases and in one area in 15 cases. In two instances avoidable factors were considered to be present but their nature could not be determined because of lack of information.

COMMENT

Although infection has not been the chief cause of maternal death among the cases studied by the committee, the occurrence of six deaths due to infection in 1960 and again in 1961 serves as a reminder that this is still an important problem. Of the six 1961 infection deaths two occurred after cesarean sections, two after abortions, one after puerperal infection following home delivery, and one from bacterial shock due to pyelonephritis. Two points of interest arise from the committee's review of these cases and of deaths due to infections in previous years. First, the diagnosis of bacterial shock following delivery or abortion may be missed if it is not kept clearly in mind. Second, when an infection appears to be present, prompt culture of blood, pus or other material is essential in order to determine the appropriate treatment.

SUMMARY

1. Forty-eight maternal deaths occurring in Mississippi during the year 1961 have been studied by the Committee on Maternal and Child Care of the Council on Medical Service of the Mississippi State Medical Association.

2. The results are presented in terms of adequacy of replies, cause of death, and avoidable factors according to the AMA "Guide for Maternal Death Studies."

3. The findings for 1961 are compared with those for 1960. The lowest number of deaths in the five years of the committee's study is noted. Data obtained were slightly less adequate than in the previous year. A continued decrease in the number of deaths from hemorrhage was observed although those from toxemia and infection remained the same. ★★★

2500 North State St.

DELIGHTFULLY DEPRESSED

Although not an ataractic agent, the word is that a new product in this pharmaceutical group has been introduced. It doesn't relieve tension and depression; it just makes the patient enjoy them.

—*Wall Street Journal*

Case Report X of the Maternal Mortality Study: Spontaneous Rupture of the Liver

MARGARET PAXTON VELLER, M.D.
Natchez, Mississippi

Case No. 293-00305-61, gravida 6, para 4, abortus 1, died of spontaneous rupture of the liver after the premature delivery of a stillborn, 2 pound female infant. She had exhibited the classical symptoms of headache, vomiting, abdominal pain, and hypertension. The committee evaluates the case on the basis of adequacy of data, cause of death, avoidability, and responsibility. The report concludes with a discussion of this rare complication of pregnancy.

THE FOLLOWING CASE REPORT represents death from spontaneous rupture of the liver associated with toxemia.

CASE NO. 293-00305-61

Case No. 293-00305-61 was a 28-year-old Negro school teacher, gravida 6, para 4, abortus 1, who died in the hospital 34 hours following delivery of a stillborn premature female infant at approximately 33 weeks' gestation. Her LMP was April 21, 1961, and her EDC was Feb. 1, 1962.

In November 1961, she was seen for the only time prior to her delivery. Her blood pressure was 150/90, and she had one-plus pretibial edema. The remainder of her physical examination was normal for her stage of gestation. Her hemoglobin was 13.1 gm. per cent, her VDRL nonreactive, and she was Rh-positive. She had no albuminuria, and she had had no symptoms of toxemia. She was started on a low salt diet, a vitamin-mineral preparation, and an oral diuretic-reserpine combination. She was given 2 cc. of Mercurhydrin intramuscularly.

She did not return for further prenatal care and was next seen on Dec. 18, 1961, at 2:30 a.m. when she entered the hospital six hours after the spontaneous onset of labor at 33 weeks' gestation. There was no history of trauma. Ten minutes later she delivered a stillborn, two-pound female infant. The attending physician arrived in time to deliver the placenta. This showed numerous infarcts and had apparently separated prematurely. She had received no medication during labor and no anesthetic for delivery. Blood loss had been moderate, and there were no lacerations.

Following delivery her blood pressure was 130/70, and she was given Ergotrate, but shortly afterward she complained of headache, and her blood pressure rose to 170/110. She was given 100 mg. meperidine, 5 mg. reserpine and 8 cc. of 50 per cent magnesium sulfate intramuscularly. Four and one-half hours post partum, her headache had not improved and her blood pressure had risen to 200/110. She was given 15 mg. of morphine sulfate and her blood pressure dropped to 160/110. Six hours after delivery she was comfortable and resting quietly with a good urinary output and no hyperreflexia, and her condition was considered satisfactory.

Two hours later she had a convulsion. Her blood pressure was 220/120. She was given 1000 cc. of 10 per cent dextrose in water and 50 cc. of 50 per cent dextrose intravenously, and 8 cc. of 50 per cent magnesium sulfate intramuscularly. A Foley catheter was inserted and 160 cc. urine obtained. Her blood pressure remained at 130-160/90 for two hours, then rose to 180/110 and she was given 15 mg. morphine sulfate and 5 mg. reserpine intramuscularly. Thirty minutes later

Obstetrician-gynecologist member, Committee on Maternal and Child Care, Council on Medical Service.

her blood pressure was 220/140, and her urinary output for the preceding hour was 200 cc.

She complained of headache and abdominal pain and began vomiting at 1:30 p.m. At 2:50 p.m. she went into shock and never regained consciousness. Her blood pressure was unobtainable. After she was given oxygen, Cedilanid, and vasopressors her blood pressure was 80 mm. Hg. systolic. Physical examination revealed a normal postpartum uterus and adnexa with no abdominal distention. Her hematocrit had fallen from a reading of 44 on admission to 25, and at this time her blood failed to clot. Two cut-downs were done, and after she was given 7 gm. of fibrinogen, her blood clotted promptly. She was given 4000 cc. whole blood. She was believed to have intra-abdominal bleeding, probably from a ruptured uterus.

At 11:35 p.m., approximately nine hours after she went into shock, she was taken to the operating room and the abdomen opened through a lower midline incision revealing the abdominal cavity to be filled with blood and the uterus and adnexa to be normal. Exploration revealed a large defect in the right lobe of the liver laterally. A right subcostal incision was made and further exploration of the liver revealed multiple deep lacerations laterally and an area 20 x 15 cm. from which the liver capsule was absent, "as though it had been stripped by a shearing force." This was repaired with difficulty, utilizing suture and surgicel. Bleeding was controlled, but the patient's blood pressure during the procedure remained at 60-80 mm. Hg. systolic.

She remained comatose, and her urinary output decreased to 100 cc. during the next eight hours. Her hematocrit on the morning following surgery was 40. Her respiration had remained labored from the onset of shock, and she died at 12:30 p.m., Dec. 19, 1961, 34 hours after delivery and approximately 24 hours after operation.

This case was reviewed by the Committee on Maternal and Child Care at its regular quarterly meeting and the following evaluations made:

I. Adequacy. The data available on this death were rated as 4 on a scale ranging from 1 (minimal) to 5 (complete). The data sheet was complete, and there was an adequate accompanying explanatory note. An autopsy, however, could not be obtained.

II. Cause of death: This death was classified as an indirect obstetric death resulting from spontaneous rupture of the liver.

III. Avoidability. This death was classified by a majority opinion as unavoidable.

IV. Avoidable factors. No avoidable factors were assigned to hospital, physician or patient.

DISCUSSION

The previous reported instances of this rare complication of pregnancy have occurred from 16 weeks' gestation to term, with most occurring in the last trimester. The patients were predominantly multiparas, with an average age of 33 years, and all had prodromal symptoms of headache and vomiting followed by right upper quadrant abdominal pain and collapse. In all the adequately documented cases, hypertension, albuminuria, and edema were present. Six patients were jaundiced. The lesion responsible for hepatic rupture has been postulated as capillary thrombosis with extravasation of red cells leading to subcapsular hematoma with spontaneous rupture of Glisson's capsule when an increase in intra-abdominal pressure occurs. The hematoma has always occurred on the superior and anterolateral surface of the liver except in one patient where it was in the caudate lobe. In the six patients who survived, a preoperative diagnosis of intra-abdominal bleeding led to laparotomy and recognition of the hepatic rent, and bleeding was controlled by suture or packing. Reputedly, immediate control of the bleeding can be obtained by digital pressure on the portal vein in the region of the foramen of Winslow, and definitive measures may be: (1) packing with hemostatic agents, (2) suturing, (3) using an electrocautery, and (4) using compression clamps. Drainage of the lesser peritoneal sac has been recommended because of the frequency of bile drainage for several days postoperatively.

SUMMARY

A maternal death due to spontaneous rupture of the liver has been reported as the 19th recorded instance of this catastrophic complication of pregnancy. ★★★

724 North Pearl St.

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Clinicopathological Conference LI

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

In CPC LI Dr. Michael Newton discusses the case of a 23-year-old white woman admitted with a chief complaint of amenorrhea. Other pertinent symptoms included a gradual increase in hoarseness of her voice, an increase in facial acne, an increase in leg, face, and pubic hair, a lethargic feeling, and clitoral enlargement. Other discussers are Drs. Robert Sloan and Dr. William V. Hare.

This patient was admitted to the University Hospital on Oct. 21, 1962. This was the second University Hospital admission of this 23-year-old white female, gravida 1, para 1, abortus 0. The chief complaint at the time of admission was "no menstrual period since June 1962." Menses began at age 12 and occurred regularly at 28 to 30 day intervals with a moderate flow lasting five to six days. The last NMP was May 1962. The patient was apparently in good health until June 1962 when her period was noted to last only two days and was described as skimpy. In July she was amenorrheic.

On July 12 she went to see a local physician. She was told at that time that she probably had a cystic right ovary. She remained amenorrheic after July. Several days prior to admission she was told by her physician that there was a suggestion of clitoral enlargement present, and hospitalization was recommended. For two to three months the patient had noted a gradual increase in hoarseness of her voice, an increase in facial acne, and an increase in leg, face, and pubic hair growth. She had also experienced a moderate "run down or lethargic feeling" although her libido was unchanged.

She lost from 150 lbs. in August to 135 lbs. in September with "help from diet pills." She began to note a decrease in breast weight and firmness about 30 days prior to admission. She denied any evidence of pain, dyspareunia, vaginal discharge, or change in appetite or bowel habits, although she admitted a lower abdominal fullness of several months' duration. The patient believed that she urinated more frequently than previously and that her urine volume had increased. She denied other urinary symptoms. A review of systems was within normal limits.

Past history revealed that the patient was previously admitted to the University Hospital in February 1960 and delivered a 7 lb., 14½ oz. female infant. The antenatal history, delivery, and postpartal course were entirely uneventful. She had a tonsillectomy at the age of 8. She reportedly had a cracked lumbar vertebra at 9 years of age but was without symptoms at the time of this admission. She reported an allergy to lanolin and Nair. The family history was not contributory.

On physical examination she had a blood pressure of 120/68, temperature 98.6, respiratory rate of 16, and her pulse was 70, height was 64½ inches, and weight was 142½ lbs. She was generally a well developed, well nourished, white female in no acute distress who appeared alert, intelligent, and cooperative. She spoke with a husky voice. Examination of the skin revealed the presence of acne across the face with moderate facial and leg hair present. She had a male escutcheon. The thyroid gland was not enlarged.

Examination of the breasts revealed no masses or areas of tenderness. The lungs were clear. There was no abdominal tenderness. There were no abdominal masses palpable and bowel sounds were normal. A moderate clitoral enlargement was noted. The vaginal mucosa was normal. The cervix was clean. The uterus was a normal size

and shape and in a normal position. The right adnexa was thought to contain a 5 x 7 cm. ovarian mass.

HOSPITAL COURSE

The admission hemoglobin was 15.2 and hematocrit was 44. The platelet count was normal. She had a total white count of 13,350 with a normal differential. Urinalysis was within normal limits. VDRL was negative. The pre-operative x-ray studies consisted of a chest x-ray which was within normal limits, skull x-rays which were within normal limits, and an IVP which showed a moderate displacement of the lower one-third of the right ureter medially without evidence of other abnormalities. There was no x-ray evidence of a soft tissue mass noted in the pelvis.

A 24 hours' urine for 17-hydroxycorticosteroids was reported as 5.1 mg., 24 hour 17-ketosteroids were reported as 33.7 mg., and 24 hour creatinine was 1.86 gm. She was an O positive blood type with negative indirect coombs. A glucose tolerance test was reported as within normal limits. The patient was taken to the operating room on Oct. 25, 1962, for an exploratory laparotomy. The patient tolerated the procedure well and had a benign postoperative course. She was discharged from the University Hospital on Nov. 1, 1962, to return to the private physician's clinic in six weeks.

Dr. Michael Newton: "This patient was a 23-year-old white woman, para 1, gravida 1, who was admitted with a chief complaint of amenorrhea. Review of the present illness indicated that her last normal menstrual period had occurred five months previously and that four months ago she had had a scanty period, lasting two days. Since then she had had no vaginal bleeding. Prior to her last normal menstrual period she had been in good health. Three months before admission a cyst of the right ovary had been noted by her physician and, since this had persisted, together with some evidence of masculinization, admission had been recommended.

"During the past four months she had noted that her voice had become more husky, that she had had facial acne, and that hair growth on the legs, face, and pubic area had increased. She had experienced a moderate "run-down" or lethargic feeling although her libido had been unchanged. Her weight had fallen from 150 to 135 pounds two to three months before admission with the aid of reducing pills but she had subsequently regained some of this. She had noticed a decrease in breast firmness and had had some lower abdominal fullness with frequency of urination. No other symptoms had been present.

"Her past history showed that she had delivered a normal infant without complications at this hospital two and one half years previously. Her menstrual periods had begun at age 12 and had occurred regularly at 28 to 30 day intervals with a moderate flow lasting five to six days. She had had no previous episodes of amenorrhea and no serious illnesses or operations. The remainder of the history was negative.

"Physical examination showed her to be 64½ inches in height and 142½ pounds in weight. Her temperature was 98.6°, pulse 70, respiratory rate 16 and blood pressure 120/68. She was well-developed and well-nourished and did not appear to be in distress. She was alert, intelligent and cooperative and spoke with a husky voice. Facial acne was noted. Hair distribution on the abdomen was of the male type and a moderate amount of hair was noted on the face and legs. The isthmus of the thyroid gland was palpable but not enlarged. The breasts were normal. The remainder of the general physical examination was negative.

"On pelvic examination moderate enlargement of the clitoris was observed. The vaginal mucosa was estrogenic in appearance. The cervix was clean. The uterus was normal in size and shape and was anteflexed. In the right adnexal area a mass about 6 cm. in diameter, probably arising in the ovary, was detected. The left ovary was thought to be normal. No other abnormalities were found.

"Laboratory studies showed her hemoglobin to be 15.2 gm., hematocrit 44 per cent, WBC 13,350 with a normal differential, urinalysis negative, serology negative and blood type O Rh positive. A glucose tolerance test was normal. 17-hydroxycorticosteroids in a 24 hour urine specimen were 5.1 mg. (normal) and 17-ketosteroids were 33.7 (elevated). Perhaps we could have Dr. Sloan review the x-ray films?"

X-RAY DATA

Dr. Robert D. Sloan: "The patient had routine skull x-rays which appeared perfectly normal. Specifically there was nothing to suggest any disturbance in the region of the pituitary or adjacent brain. An intravenous pyelogram was performed. The kidneys were normal in size, contour, and position. There was no displacement of the kidneys by an adrenal mass. There was a suggestion

of some increased soft tissue density in the pelvis, but certainly a mass is not outlined as such."

DISCUSSER'S DIAGNOSIS

Dr. Newton: "In brief, then, we have a young woman who has recently developed symptoms and signs of masculinization, amenorrhea, and a right adnexal mass. Her history of normal menarche and development, regular menstruation and ability to carry and deliver a normal child indicates adequate female function. Evidence for masculinization seems clear from the voice changes, hirsutism, and hypertrophy of the clitoris: amenorrhea, while not essential, is consistent with these changes. Additional evidence of masculinization such as increased muscle development, temporal alopecia, and regression in size of breasts and pelvic organs was not noted, but these changes may indicate more marked or long-standing causes. Although there are many possible reasons for amenorrhea, it is more logical to consider it in connection with the masculinization, and the presence of an adnexal mass makes it almost impossible to avoid the conclusion that the three major symptoms are part of the same picture.

"Masculinization and amenorrhea are disorders of endocrine function and may arise from the pituitary, adrenal, or ovary. The only pituitary condition which might conceivably be responsible for this patient's clinical picture is the adiposogenital syndrome which may be due to hypothalamic causes or to a pituitary tumor. Although the 17-ketosteroids are often elevated in this condition, it usually occurs during adolescence and obesity is prominent. A normal skull x-ray would tend to exclude a pituitary tumor while the adnexal mass would be hard to explain unless it were due to some unrelated cause. It would have been helpful to have a FSH determination.

"Adrenal hyperplasia or tumor may produce the adrenogenital syndrome. Several features presented by this patient, including the high 17-ketosteroids, are suggestive of this condition. Against it is the presence of the adnexal mass, and it would have been helpful to have studies of the FSH level (often low in adrenal hyperplasia), urinary pregnanetriol (often elevated in adrenal hyperplasia), and fractionation of the 17-ketosteroids (dehydroepiandrosterone often elevated in adrenal malignancy). Attempts to demonstrate an adrenal tumor radiologically might have been helpful if an adrenal lesion were seriously considered.

"The ovary is perhaps a more likely cause of the clinical picture. Possible ovarian disorders include the Stein-Levinthal syndrome (polycystic ovaries), masculinizing ovarian tumors (arrhenoblastoma, masculinizing thecoma or luteoma, adrenal rest tumor or hilar cell tumor) or more rarely a combined tumor such as a masculinovoblastoma or gynandroblastoma. In the Stein-Levinthal syndrome ovarian enlargement is usually bilateral and the elevation of 17-ketosteroids is usually not so high. However, if seriously suspected, endometrial biopsy (usually productive of proliferative endometrium) or attempts to demonstrate enlarged ovaries by intraperitoneal injection of CO_2 are helpful. The combined ovarian tumors are very rare and evidence of feminization is usually present—which was not the case here. A very likely possibility is a masculinizing ovarian tumor. Perhaps the 17-ketosteroids were a little high although high values can certainly be found in this type of tumor. Fractionation of the 17-ketosteroids would certainly have been helpful, and an endometrial biopsy showing endometrial atrophy or a vaginal smear showing diminished estrogenic effect would have supported the diagnosis. There is no good way of distinguishing between the different types of masculinizing ovarian tumors, until you have the pathologist's expert assistance.

"In summary, it seems appropriate to consider this patient's masculinization, amenorrhea, and right adnexal mass as part of one syndrome and the most likely diagnosis to me is a masculinizing ovarian tumor, whose exact nature can only be determined under the microscope. It should be emphasized, in addition, that masculinization and, particularly, amenorrhea may be caused by dysfunction of one or more endocrine organs and that when a patient presents herself with this picture, complete investigation should be carried out. This should include, for example, study of the pituitary by skull x-ray and FSH determinations, of the thyroid by protein bound iodine and/or basal metabolic rate, adrenal by 17-hydroxycorticosteroids and 17-ketosteroids (with fractionation if available and pregnanetriol determinations), and of the ovary by vaginal cytology to determine estrogen effect, examination under anesthesia and culdoscopy, if necessary, and x-ray visualization. When refined tests of ovarian hormone levels are available, these will be of great help. An endometrial biopsy is an essential part of any complete work-up. Only when these (and perhaps other) studies have been properly carried out, can an

intelligent evaluation be made of the cause of the patient's problem."

PATHOLOGIST'S REPORT

Dr. William V. Hare: "At surgery a tumor was found, as Dr. Newton suggested, in the ovary. This tumor was measured in the laboratory as ovoidal mass measuring 4½ cm. in length by 3½ cm. in diameter. It was definitely encapsulated and compressed, the residual ovarian tissue off to one side. The tube was attached and it did not appear to be involved by the tumor. The tumor bulged on cut section. It showed fresh hemorrhage and areas of necrosis. In the nonnecrotic areas it had a distinctly yellowish cast which was described by the pathologist and at that time he was unprejudiced since he didn't know what type tumor he was dealing with. On frozen section a sample was taken and called a granulosa cell ovarian tumor—probably thecoma. I have reviewed those frozen sections, and it was an unfortunate sample. Since the tumor was fairly large a little piece was taken out of one corner, and it was difficult to interpret. I suspect that the history of masculinization was not known by the pathologist, but I can not tell from this report. Now, in Figure 1 we see the tumor is encapsulated and note the salpinx on the side is not involved. Now let's see it on cut section (Figure 2). Here the tumor has been bivalved. Note the ovarian tissue located on the periphery, with a thick capsule in between it and the tumor proper.

Figure 1.

Figure 2.

"Now, in the next slide (Figure 3) we see the characteristic microscopic pattern of an arrhenoblastoma. There are cords and masses of spindle cells mixed with large pink cells with abundant cytoplasm. In many cases these latter cells are lipid-laden and some of them show vacuolization. Many of them also show small brown granules in the cytoplasm. These are the cells which are identical with the interstitial cells in the testes which are masculinizing cells. There is some argu-

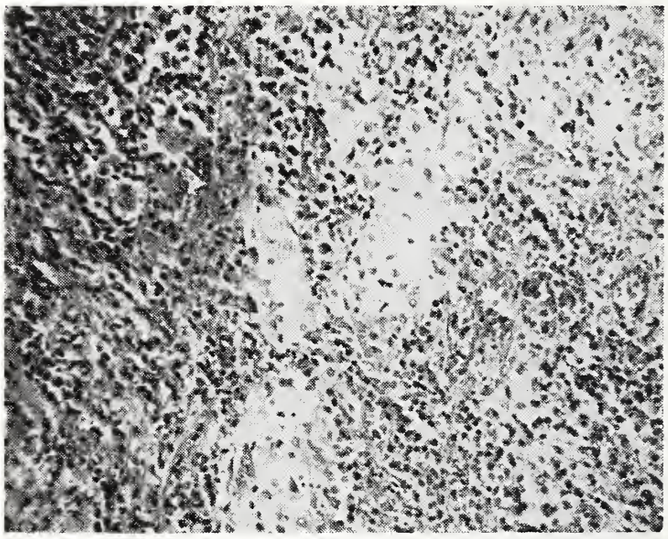

Figure 3.

ment about whether they are identical with the hilar cells or not. But at least they are masculinizing hormone producers.

"Now let's see that next slide (Figure 4). This tumor is of a mixed pattern. You can see the interstitial cells looking more lilac or lavender here and then the deeper purple cells growing in cord-like structures which are suggestive of the testicular tubules of the undeveloped testes. This is therefore a testicular type tumor. There is a pure type which is composed of readily recognizable tubules called the testicular adenoma of Pick and these are always benign. In this case the tumor is spoken of as the intermediate type of arrhenoblastoma. It is a masculinizing tumor and therefore arrhenoblastoma, and there are some spindle-shaped cells that are sarcomatoid or sarcomatous—whatever you want to call it. These

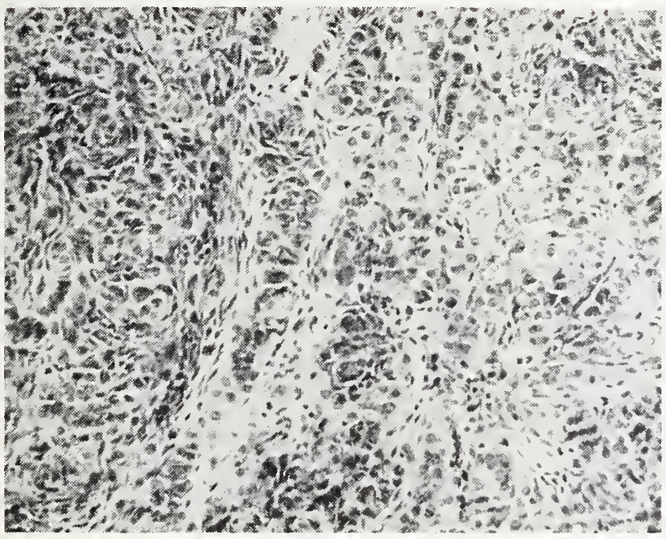

Figure 4.

are mixed with areas having the tubular pattern of the testes, and they have the interstitial type cells which are probably the hormone producers.

"Now, in Figure 5 we see a more undifferentiated area, but at least it shows the capsule at the periphery which was largely intact. Now, in one place in our section we found a bulging area of tumor, and it is always difficult to tell whether it is a benign nodule just pressing through the capsule or true infiltration. This is a relatively undifferentiated spindle cell area. In Figure 6 there is another area similar to where the frozen section was sampled. This is the spindle-shaped area that is called the sarcomatoid pattern. I think you can see it looks much like a spindle cell sarcoma of almost any type.

"Pathologically, arrhenoblastomas are generally classified as malignancies, and they are commonly divided into three groups. First, there are the testicular adenomas where tubules are well formed and the tumors are clinically always benign. Second, there is the group that is frankly sarcomatous which are made up nearly entirely of the spindle-shaped cells but have a clinical course of masculinization. In nearly all of these if you look far enough you can find the interstitial type cells. Third, there is a group called the intermediate forms in which you have a mixture. Different pa-

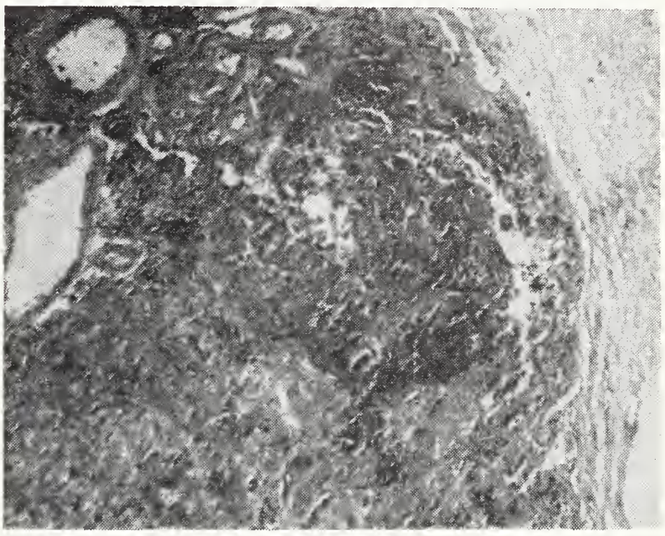

Figure 5.

thologists disagree on the subclassification of these tumors. Looking at our present case I thought this was a fine example of the intermediate form with sarcomatous elements and epithelial cords, and then I saw that the first pathologist who saw it called it the sarcomatoid variety.

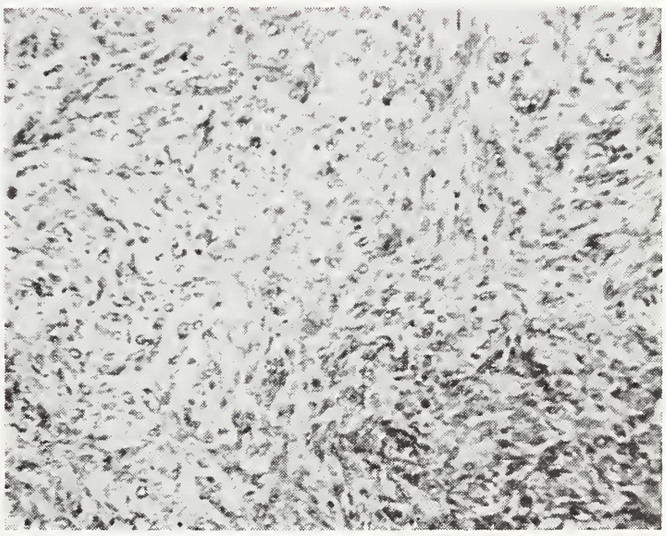

Figure 6.

"Basically, nearly all of these tumors function. First, they have the demasculinizing symptoms of lack of menstruation and perhaps decrease of breast substance. Later the more serious masculinizing symptoms occur consisting of acne, hirsut-

ism, hoarseness, and increased libido. The relationship of symptoms to prognosis is not close. The overall death rate from the disease is estimated at from 20 to 30 per cent. The tumors, when they spread, usually recur locally, but they have been reported to metastasize to lymph nodes and rarely via the blood stream. They are uncommon tumors, and no one has any great experience with them personally so we have to study the cases that have been reported cumulatively.

"For the follow-up on this case, I called the attending physician and asked him about the patient's symptoms. He told me first (and somewhat surprisingly from our history) that her libido was markedly increased prior to her operation, but that it was back to normal. Apparently the patient was embarrassed to discuss this point with the individual taking our history. Second the ketosteroids, which were up, are now back to normal. Third, the hirsutism, which was present at that time, has gotten a little better but is clearly not back to normal. The acne disappeared. This is rather classical for these tumors. When the tumors are removed, the patient regains her femininity and gets some regression, but not complete, of the masculinizing symptoms. I don't have it in my notes but I believe he said she was menstruating normally again. The husky voice that she had is also still present to some extent but is thought to be better. Her clitoris is still hypertrophic. The breasts seem to never have changed much. She wasn't sure how much her breasts decreased originally and is not sure how much they have subsequently grown."

Dr. Newton: "Do I understand you to say that there is some chance of this tumor being malignant?"

Dr. Hare: "The overall figures in the series vary from 20-30 per cent fatal, but in that series you will find that in several of the cases the tumor was found adherent to local organs at the time of surgery. I suspect that if you eliminated those cases that your prognosis then would run close to 90 per cent for a five year cure rate." ★★★

2500 North State St.

A DEAD DOVE

Jimmy Ward told this story on Dr. H. C. Ricks of Jackson in his column "Crossroads" in the *Jackson Daily News*. During the dove hunting season, Dr. Ricks fired away at several doves flying by at low level. When none fell, he turned to his hunting partners and said, "You have just witnessed a miracle! Somewhere in that flock of doves flies a dead one."

Radiologic Seminar XXIV: Spontaneous Rupture of the Esophagus

JOHN W. EVANS, M.D. and NADIA A. TYSON, M.D.
Jackson, Mississippi

RUPTURE OR PERFORATION of the esophagus may occur with intrinsic lesions of this structure, as the result of trauma, and occasionally as a complication of disease processes elsewhere in the body. So-called spontaneous rupture has also been described, and all of the factors involved in this entity are not well understood. Predisposing factors may include acute alcoholism, overdistention of the stomach, postoperative states, and prolonged or violent wretching, but none of these is a prerequisite. This spontaneous rupture is more serious than instrumentation rupture, because of the fact that the stomach is usually empty in this situation and there is a clinical alertness regarding such a complication. Pre-existing esophageal disease, such as a lye stricture with surrounding mediastinal fibrosis, may also result in a more benign course when perforation does occur.

Spontaneous rupture occurs most frequently in males and may be one of the most catastrophic of the visceral accidents. The tear is usually located in the distal esophagus in the region of the ampulla and along the anterior wall to the left of the midline. Occasionally it may extend through the diaphragm. Following the tear, esophageal and gastric contents have ready access to the mediastinum and left pleural cavity, and with vomiting, large quantities of gastric contents may be pushed through the defect.

The presenting clinical symptoms in the classical case are excruciating pain, substernal or epigastric in location, with radiation to one or both shoulders. Dyspnea, cyanosis, shock, and abdominal rigidity may develop rapidly. Prompt diag-

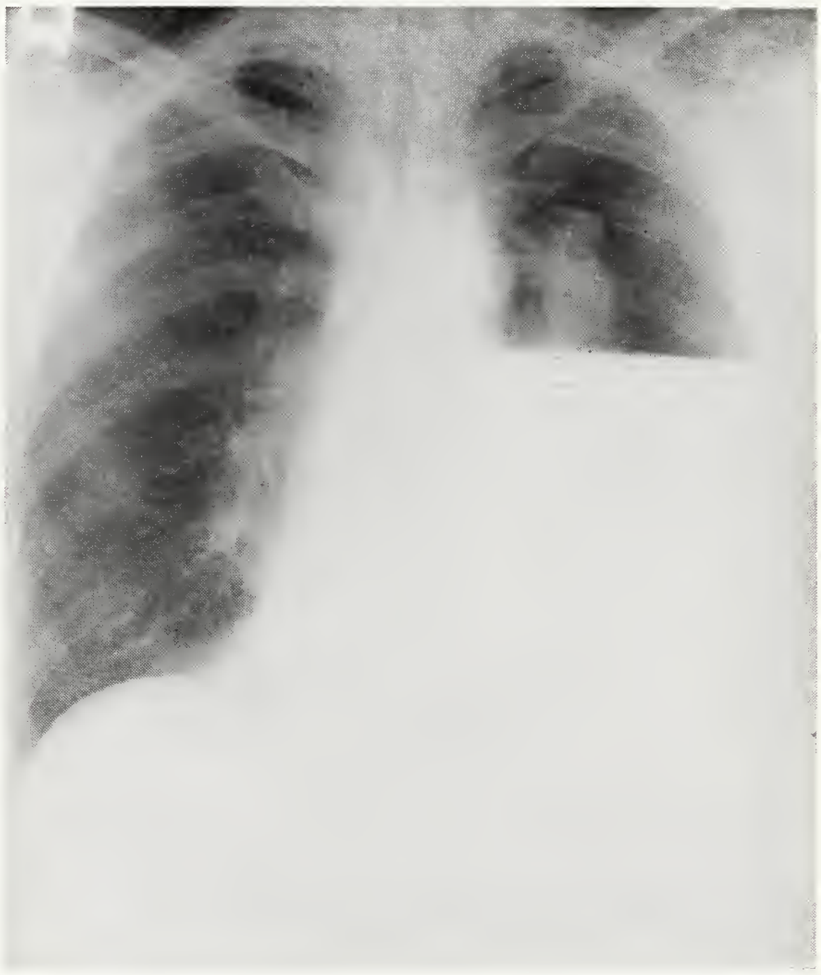

Figure 1. Routine chest film revealing a large left hydropneumothorax. Not demonstrated on the reproduction is the presence of soft tissue emphysema overlying both apices.

Sponsored by the Mississippi Radiological Society.

From the Department of Radiology, St. Dominic Jackson Memorial Hospital.

nosis and surgical treatment is important, because death can occur within 48 hours.

The chief radiographic abnormalities relate to the presence of mediastinal emphysema and/or left hydrothorax or hydropneumothorax. The presence of the esophageal tear can be confirmed by barium swallow studies, preferably using a contrast material other than barium.

We would like to report two cases of so-called spontaneous esophageal rupture which have occurred within the past year in our hospital.

Case I. Mr. E. H., a 50-year-old white male, entered with the complaint of chest pain of 24 hours' duration present only on inspiration. He denied violent straining or vomiting. An outside film brought in with the patient revealed a left pleural effusion with questionable mediastinal air. A chest film obtained in this hospital revealed a marked hydropneumothorax on the left with evidence of subcutaneous emphysema in both supraclavicular regions (Figure 1). An esophageal study, using Lipiodol, revealed a rupture of the distal esophagus with extravasation of the media into the left pleural cavity (Figure 2). Following tube drainage of the left pleural space the distal esophagus was explored. A tear in the left posterior lateral portion of the distal esophagus was noted without evidence of carcinoma, esophagitis, or other pathology. A biopsy was reported as "benign esophageal mucosa with lymphangiectasis."

Case II. Mr. L. H., a 50-year-old white male, had a sudden onset of vomiting following ingestion of meat, with the development of subsequent aching in the substernal area. He refused hospital admission for several days, but eventually consented because of lack of any improvement in his symptoms. A chest film on admission revealed

Figure 2. Lipiodol swallow, in the lateral projection, showing contrast material out in the pleural space and anterior mediastinal emphysema. The latter has been retouched for purposes of illustration. There is also a small amount of the contrast material which has been aspirated into the bronchi.

Figure 3. An oblique contrast study of the esophagus demonstrating extensive extravasation of the contrast material out into the lower paraesophageal mediastinum, as well as a subdiaphragmatic extension.

subcutaneous emphysema in the right supraclavicular region, as well as what were interpreted as granulomatous lesions of uncertain age within the lung fields. A study of the esophagus revealed perforation of the lower one-third of this structure with opaque medium extravasating, both above and below the diaphragm (Figure 3). At surgery a 6 cm. laceration beginning above the diaphragm and ending 1 inch below this structure was noted in the right posterior wall. An irregular, thick-walled abscess cavity was also noted around this region. ★★★

969 Lakeland Dr.

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THE POWER OF LIGHT

The farmer was "assisting" at the birth of his latest child—he was holding the lamp. When the doctor delivered three fine babies, the farmer suddenly left the room.

"Come back with the lamp!" yelled the doctor.

"Nope," was the reply. "Ain't comin' back, Doc! It's the light that's attractin' 'em."

The President Speaking

'The Robins Award'

JOHN G. ARCHER, M.D.
Greenville, Mississippi

THE 1964 MSMA-ROBINS AWARD will be presented to a Mississippi physician for outstanding community service during our 96th Annual Session. It is not recognition for scientific achievement or professional attainment, because suitable awards in these connections exist in ample numbers. The community service plaque carries enormous prestige, since, by its very nature, it requires the association to select from among many worthy and deserving physicians a single recipient.

There is much more to the Robins award than the giving of a token to a doctor who takes his obligations and opportunities for citizenship seriously. It is really a forceful reminder that our hometown looks to the men and women of medicine to extend more than a healing hand. Because of long and extensive education, judgment and experience tempered in the fire of decision, and responsibility for life and health, the physician has a wealth of potential as a community and civic contributor.

Whether he serves on his school board, gives his time in a boys' club project, works for traffic safety, or helps locate a new industry, he fulfills a role which few demand of him but of which all know he is capable. Nobody has to be told that the physician is committed to a 24 hour job. When he takes his place in community service, he finds a warm reception, because his fellow citizens readily recognize the value which must be attached to his time.

Next month, I shall learn with all my colleagues who has been chosen to receive the MSMA-Robins award. And I shall have renewed pride in the realization that all physicians who serve their community are at that moment being recognized. ★★★

96th Annual Session

Mississippi State Medical Association
Jackson, May 11-14, 1964

JACKSON, SEAT OF MISSISSIPPI'S government and one of the nation's leading medical centers, will host the 96th Annual Session of the association, which with concurrent events and meetings, will offer physicians four consecutive days of intensive postgraduate education. Two special program features, a Congress on Health Quackery and a Symposium on Narcotic Addiction, May 13-14, promise to be another annual session first. The House of Delegates, the association's policy-making body, will meet May 11 as the initial activity and again on May 14, the closing meeting.

The Woman's Auxiliary will conduct its 41st Annual Session on May 12 with pre-convention activities set for the preceding day. Major association and Auxiliary activities will center around the headquarters at the Hotel Heidelberg.

Dr. John G. Archer, Greenville, president, will address the House on May 11 and the president-elect, Dr. Omar Simmons, Newton, will be inaugurated as 1964-65 association head May 14 at the concluding meeting.

Principal speaker from among more than 50 scheduled will be Dr. Edward R. Annis of Miami, president of the American Medical Association. Featured guest speakers for the Scientific Assembly include: Oliver Field, Chicago, director of the AMA Department of Investigation; Dr. Martin Dobelle, Washington, D. C., Bureau of Medicine, Food and Drug Administration; Dr. William H. Gordon, Lubbock, Texas; Hon. Carl DeBaggio, Washington, D. C., chief counsel to the U. S. Bureau of Narcotics, and Dr. Robert W. Rasor, director of the U. S. Public Health Service Hospital, Lexington, Ky.

Specialty societies will meet in luncheon, banquet, and scientific sessions during the week, and medical alumni have scheduled banquet-dance occasions. The annual association banquet and dance is set for Wednesday evening. A recreational highlight will be the annual golf tournament to be conducted May 13 at the Jackson Country Club.

The 1964 Technical Exhibit consisting of exhibits presented by established pharmaceutical firms, and the scientific exhibit, presented by physicians, foundations, and organizations, will be located in the Olympic Room, Hotel Heidelberg.

Hotel reservations may be obtained from the hotel of individual preference or through MSMA Housing Bureau, Hotel Heidelberg, Jackson.

OFFICIAL CALL

To all members of the Mississippi State Medical Association:

The 96th Annual Session of the Mississippi State Medical Association is called to meet at Jackson, Mississippi, on Monday, May 11, 1964, pursuant to Article V of the constitution. The House of Delegates will be convened at 1:30 o'clock p.m. at the Hotel Heidelberg.

The Scientific Assembly, consisting of seven sections and a Congress on Quackery, will meet during the period May 12-14, 1964.

No member or guest will be permitted to participate in any aspect of the annual session until regularly registered.

JOHN G. ARCHER
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C. G. SUTHERLAND
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1960-1961 . . . . . G. Swink Hicks, M.D., Natchez

1961-1962 . . . . . Lawrence W. Long, M.D., Jackson

1962-1963 . . . . . C. P. Crenshaw, M.D., Collins

ACTIVITIES CALENDAR

REGISTRATION

General registration for the Scientific Assembly and House of Delegates will be located on the second level of the Hotel Heidelberg in the Victory Foyer-Lounge area. No person will be admitted to any activity of the Annual Session unless first registered. The Secretary's Office will be located in the Victory Foyer. Hours of registration are: May 11, 9 a.m. to 5 p.m.; May 12, 8 a.m. to 5 p.m.; May 13, 8 a.m. to 5 p.m.; and May 14, 8 a.m. to 1:30 p.m.

MONDAY, MAY 11, 1964

9:00 a.m.	Miss. Association of Pathologists, Creole Room, King Edward
12:30 p.m.	Miss. Orthopaedic Society, Luncheon, Gold Room, King Edward
1:30 p.m.	House of Delegates, Victory Room, Heidelberg
2:00 p.m.	Miss. Urological Association, Parlor B, Heidelberg
4:00 p.m.	Woman's Auxiliary Preconvention Executive Board, Walnut Room, King Edward
6:00 p.m.	Miss. Association of Pathologists, Fellowship Hour and Banquet, Kings Inn
6:30 p.m.	Miss. Radiological Society, Fellowship Hour and Banquet, Walnut Room, King Edward
6:30 p.m.	Miss. Urological Association, Fellowship Hour and Banquet, Parlor A, Heidelberg
7:00 p.m.	University of Tennessee Medical Alumni, Fellowship Hour and Banquet, Heidelberg Roof
7:00 p.m.	Tulane University Medical Alumni, Fellowship Hour and Banquet, Rose and Silver Rooms, Heidelberg

TUESDAY, MAY 12, 1964

7:15 a.m.	Miss. Medical Political Action Committee, Breakfast, Members and Auxiliary, Heidelberg Roof
8:00 a.m.	Trauma Conference, American College of Surgeons, Rose Room, Heidelberg
9:00 a.m.	Woman's Auxiliary, General Session, Coronet Room, King Edward
9:00 a.m.	Section on Medicine, Victory Room, Heidelberg
10:00 a.m.	Reference Committee on Reports of Officers and Board of Trustees, Parlor A, Heidelberg
12:00 noon	Miss. Chapter, American Academy of Pediatrics, Luncheon and Meeting, Bamboo Room, King Edward

12:00 noon	American College of Surgeons, Luncheon, Silver Room, Heidelberg
12:00 noon	Fifty Year Club Luncheon, Parlor B, Heidelberg
12:15 p.m.	Miss. Society of Internal Medicine and American College of Chest Physicians, Joint Luncheon, Club Room, King Edward
12:30 p.m.	Woman's Auxiliary Luncheon, Jackson Country Club
2:00 p.m.	Section on Surgery, Victory Room, Heidelberg
2:00 p.m.	Section on Preventive Medicine, Rose Room, Heidelberg
2:00 p.m.	Reference Committee on Medical Practices, Parlor A, Heidelberg
2:00 p.m.	Council on Constitution and By-Laws, Heidelberg Roof
3:30 p.m.	Woman's Auxiliary Postconvention Executive Board, Walnut Room, King Edward
4:00 p.m.	Miss. Diabetes Association, Parlor B, Heidelberg
4:00 p.m.	University of Mississippi Medical Alumni, Business Meeting, Silver Room, Heidelberg
5:30 p.m.	Miss. Chapter, American Academy of Pediatrics, Fellowship Hour and Banquet, Club Room, King Edward
7:00 p.m.	University of Mississippi Medical Alumni, Fellowship Hour and Buffet Supper, Jackson County Club

WEDNESDAY, MAY 13, 1964

7:30 a.m.	Past Presidents' Breakfast, MSMA, Parlor A, Heidelberg
7:30 a.m.	Past Presidents' Breakfast, Woman's Auxiliary, Silver Room, Heidelberg
9:00 a.m.	Congress on Health Quackery, Victory Room, Heidelberg
11:30 a.m.	Miss. Ob-Gyn Society, Fellowship Hour and Luncheon, Silver Room, Heidelberg
11:45 a.m.	International College of Surgeons Luncheon, Creole Room, King Edward
12:00 noon	Flying Physicians Association Luncheon, Walnut Room, King Edward
2:00 p.m.	Section on Obstetrics and Gynecology, Victory Room, Heidelberg
2:00 p.m.	Section on Pediatrics, Rose Room, Heidelberg
2:00 p.m.	Reference Committee on Miscellaneous Business, Parlor A, Heidelberg
2:00 p.m.	Nominating Committee, MSMA, Open Session, Parlor B, Heidelberg
6:30 p.m.	MSMA Fellowship Hour, All Members and Guests, Rose and Silver Rooms, Heidelberg
7:30 p.m.	Annual Association Banquet and Dance, Victory Room, Heidelberg

ACTIVITIES CALENDAR

THURSDAY, MAY 14, 1964

7:30 a.m.	Southern Medical Association Breakfast, Heidelberg Roof (By Invitation)
9:00 a.m.	Section on General Practice, Victory Room, Heidelberg
9:00 a.m.	Section on EENT, Rose Room, Heidelberg
12:00 noon	Miss. Academy of General Practice Luncheon, Heidelberg Roof
12:00 noon	Section on EENT Luncheon, Silver Room, Heidelberg
1:30 p.m.	House of Delegates, Victory Room, Heidelberg

POLITICAL ACTION COMMITTEE BREAKFAST

All MSMA and Auxiliary members are invited to the Mississippi Medical Political Action Committee breakfast on Tuesday morning, May 12, Hotel Heidelberg Roof, at 7:15 a.m. A prominent speaker will be featured. Tickets may be secured at general registration. MPAC officers are Drs. George E. Twente of Jackson, chairman, and Howard A. Nelson of Greenwood, secretary-treasurer.

GOLF TOURNAMENT

The annual MSMA golf tournament will be conducted May 13 at the Jackson Country Club. Dr. William A. Smithson of Jackson, tournament chairman, will furnish details to interested members.

ANNUAL ASSOCIATION BANQUET AND DANCE

Members, their ladies, and guests will enjoy the annual association gala on Wednesday evening, May 13, beginning with the Fellowship Hour at 6:30 p.m. in the Rose and Silver Rooms at the Hotel Heidelberg. The banquet will be served in the Victory Room at 7:30 p.m. The special floor show will feature Roger Ray, star of television and night clubs, with dancing to the music of Jerry Lane and his orchestra until 12:30 a.m. Tickets will be available at general registration.

EXECUTIVE BUSINESS

HOUSE OF DELEGATES

Monday, May 11, 1964
1:30 p.m.
Hotel Heidelberg
Victory Room
B. B. O'Mara, Biloxi
Speaker
Howard A. Nelson,
Greenwood, Vice Speaker

DR. O'MARA

DR. NELSON

MEETINGS OF THE HOUSE

The meeting will be opened by the President, and the Speaker, in presiding over the House, will announce the order of business. An open session to which all members and Auxiliary members are invited will feature the Address of the President by Dr. John G. Archer of Greenville and a special address by Dr. Edward R. Annis of Miami, president of the American Medical Association. The adjourned meeting of the House will be convened in the Victory Room at 1:30 p.m. on Thursday, May 14.

REFERENCE COMMITTEES

Reports of Officers and Board of Trustees, Tuesday, May 12, Parlor A, 10:00 a.m.

Medical Practices, Tuesday, May 12, Parlor A, 2:00 p.m.

Constitution and By-Laws, Tuesday, May 12, Heidelberg Roof, 2:00 p.m.

Miscellaneous Business, Wednesday, May 13, Parlor A, 2:00 p.m.

Nominating Committee, Wednesday, May 13, Parlor B, 2:00 p.m.

THE SCIENTIFIC ASSEMBLY

COUNCIL ON SCIENTIFIC ASSEMBLY

C. G. Sutherland, M.D., Chairman

Dr. Sutherland

THE SCIENTIFIC EXHIBIT

Olympic Room
The Hotel Heidelberg

THE TECHNICAL EXHIBIT

Olympic Room
The Hotel Heidelberg

SCIENTIFIC SECTIONS

Eye, Ear, Nose and Throat

Medicine

Obstetrics and Gynecology

Pediatrics

Preventive Medicine

Surgery

General Practice
The Hotel Heidelberg

CONDUCT OF THE SCIENTIFIC ASSEMBLY

The order of exercise, papers, and discussions as set forth in the official program shall be followed until completion. When the program of a section is not completed in the time allotted, it shall not be permitted to continue into that assigned to another section. No paper or address shall occupy more than twenty minutes, except those of the President, Orator, and guests. In formal discussion, no one shall speak more than five minutes, and in informal discussion, no one shall speak more than three minutes and not more than one time. All papers read before the association shall become its property. Each paper must be read by its author and deposited with the Secretary (or Chairman of the Section) when read.

THE SCIENTIFIC EXHIBIT

Physicians, foundations, and organizations will present the Scientific Exhibit. Physician-members of the Mississippi State Medical Association are eligible for the Scientific Achievement Award for excellence in scientific work. Guest exhibitors, foundations, and organizations do not participate for the award but may receive recognition for outstanding presentations. The Scientific Exhibit is located in the Olympic Room, Hotel Heidelberg.

EXHIBITORS

"Mammography"
James M. Keegan, M.D., Houston, Texas

"Giant Pulmonary Cysts"
W. R. Fain, M.D.; J. H. Conn, M.D., and G. D. Campbell, M.D., Jackson

"Transplantation of Organs"
James D. Hardy, M.D., Jackson

"The Therapeutic Community; Psychiatric Units in General Hospitals"
Oscar E. Hubbard, M.D., Jackson

"North American Blastomycosis"
John F. Busey, M.D., Jackson

"Surgical Treatment of Cardiovascular Disease"
Oscar Creech, Jr., M.D.; Charles Pearce, M.D.; Keith Reemtsma, M.D.; and Robert Schramel, M.D., New Orleans, La.

"Surgical Treatment of Baldness"
James W. Burks, M.D. and Kenneth Cummings, M.D., New Orleans, La.

"Cine Angiography in Heart Disease"
Mississippi Heart Association

"The Prevention of Skin Cancer—A Controlled Five Year Evaluation of Half-Face Dermal Planing"
Ronald R. Lubritz, M.D., Hattiesburg; James W. Burks, Jr., M.D., New Orleans, La.; and John Marascalco, M.D., Greenville

THE TECHNICAL EXHIBIT

The Mississippi State Medical Association presents with pride the 1964 Technical Exhibit. Established firms engaged in the manufacture and distribution of pharmaceuticals, supplies, equipment, and in providing varied services will present exhibits. Visit each exhibit often and discuss products and services with the Professional Service Representatives. Since the association conducts its scientific activity by section meetings, continuous viewing of exhibits during off-section schedules is possible and specific reservations of time are unnecessary for physicians to visit the Technical Exhibits. Only registered members and guests are admitted. The Technical Exhibit is located in the Olympic Room, Hotel Heidelberg.

EXHIBITORS	BOOTH
Abbott Laboratories, North Chicago, Ill.	4
Airkem Service, Inc., Jackson, Miss.	3
Aloe Division of Brunswick Corporation, New Orleans, La.	39
Bentex Pharmaceutical Company, Houston, Texas	34
Ciba Pharmaceutical Products, Inc., Summit, N. J.	23
The Coca-Cola Company, Atlanta, Ga.	5
Deposit Guaranty Bank, Jackson, Miss.	44
Dome Chemicals, Inc., New York, N. Y.	41
Eli Lilly and Company, Indianapolis, Ind., Scientific Sponsor (Grant)	
Geigy Pharmaceuticals, Yonkers, N. Y.	13
Kay Surgical, Inc., Jackson, Miss.	9
Lanier Company, Atlanta, Ga.	46
Lederle Laboratories, Pearl River, N. Y.	32
J. A. Majors Company, Dallas, Texas	18
McNees Medical Supply Company, Jackson, Miss.	33
McNeil Laboratories, Fort Washington, Pa.	6
Mead Johnson Laboratories, Evansville, Ind.	10
Merck Sharpe and Dohme, New Orleans, La.	1
William S. Merrell Company, Cincinnati, Ohio	38

Merrill, Lynch, Pierce, Fenner, and Smith, Jackson, Miss. 49
Mississippi Hospital and Medical Service, Jackson, Miss. 12
Mutual Benefit Life Insurance Company, Newark, N. J. 35
National Drug Company, Philadelphia, Pa. 27
Parke, Davis and Company, Detroit, Mich. 11
Pepsi-Cola Company, Jackson, Miss. 48
Pfizer Laboratories, New York, N. Y. 19
William P. Poythress and Company, Inc., Richmond, Va. 50
Ramar Health Products, Athens, Ala. 43
A. H. Robins Company, Richmond, Va. 2
Roche Laboratories, Nutley, N. J. 37
William H. Rorer, Inc., Ft. Washington, Pa. 28
St. Paul Fire and Marine Insurance Co., St. Paul, Minn. 20
Sandoz Pharmaceuticals, Hanover, N. J. 29
Schering Corporation, Union, N. J. 17
G. D. Searle and Company, Chicago, Ill. 14
Smith, Miller and Patch, Inc., New York, N. Y. 16
Southern Surgical Supply Co., Inc., New Orleans, La. 24
E. R. Squibb and Sons, New York, N. Y. 7
Stuart Company, Pasadena, Calif. 47
Upjohn Company, Kalamazoo, Mich. 22
U. S. Vitamin and Pharmaceutical Corp., New York, N. Y. 42
Wallace Laboratories, Cranbury, N. J. 21
W-T-S Pharmaceuticals, Rochester, N. Y. 8

REGISTRATION FOR EXHIBIT PRIZES

Visit the Technical Exhibits often and qualify for the drawing of attractive prizes. Obtain necessary initials as you visit each booth. Deposit cards at Registration not later than 5:00 p.m., Wednesday, May 13.

SECTION ON MEDICINE

DR. HUDSON

Tuesday, May 12, 1964
Victory Room
Beginning at 9:00 a.m.

J. Manning Hudson, Jackson
Chairman
A. B. Smith, Meridian
Secretary

MALABSORPTION SYNDROME
E. Leonard Posey, Jackson

MEDICAL MANAGEMENT OF UREMIA
C. Thorpe Ray, Columbia, Missouri

SYSTEMIC LUPUS ERYTHEMATOSIS
Leon M. Shulman, Baltimore, Maryland

CLINICAL USES OF CLOSED RENAL BIOPSY
Ben Butler Johnson, Jackson

ELECTION OF 1965 SECTION OFFICERS
The Chairman Presiding (Only registered members of the section may vote)

SECTION ON SURGERY

DR. BUSH

Tuesday, May 12, 1964
Victory Room
Beginning at 2:00 p.m.

Eugene A. Bush, Laurel
Chairman
R. J. Field, Jr., Centreville
Secretary

SEMINAR ON MALIGNANCY OF THE BREAST
James D. Hardy, Jackson, *Moderator*

I
James M. Keegan, Houston, Texas

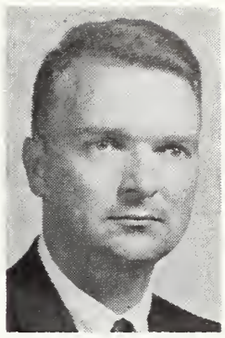
II
Nylene E. Eckles, Houston, Texas

III
George F. Archer, Greenville

IV
Thomas F. Puckett, Hattiesburg

ELECTION OF 1965 SECTION OFFICERS
The Chairman Presiding (Only registered members of the section may vote)

SECTION ON PREVENTIVE MEDICINE



DR. COBB

Tuesday, May 12, 1964
Rose Room
Beginning at 2:00 p.m.

Alton B. Cobb, Jackson
Chairman
William E. Noblin, Jackson
Secretary

MATERNAL MORTALITY IN MISSISSIPPI
Michael Newton, Jackson

A STATE-WIDE IMMUNIZATION STATUS SURVEY
Stephen Moore, Jackson

MISSISSIPPI'S MENTAL HEALTH PLANNING PROGRAM
Dorothy Moore, Jackson

PROGRAMS FOR CHANGING NEEDS IN PUBLIC HEALTH
H. B. Cottrell, Atlanta, Georgia

ELECTION OF 1965 SECTION OFFICERS
The Chairman Presiding (Only registered members of the section may vote)

CONGRESS ON HEALTH QUACKERY

Wednesday, May 13, 1964
Victory Room
Beginning at 9:00 a.m.

C. G. Sutherland, Jackson
Presiding

I

John G. Archer, Greenville

II

Martin Dobelle, Washington, D. C.

III

Oliver Field, Chicago, Illinois

IV

William H. Gordon, Lubbock, Texas

Special adjunctive exhibits on health quackery sponsored by the American Medical Association and the U. S. Food and Drug Administration may be viewed in the Olympic Room, the exhibit hall adjacent to the principal meeting auditorium.

SECTION ON OBSTETRICS AND GYNECOLOGY

DR. BUTLER

Wednesday, May 13, 1964
Victory Room
Beginning at 2:00 p.m.

Frank L. Butler, McComb
Chairman

John T. Kitchens, Jackson
Secretary

CANCER AND PREGNANCY—THE EVER GROWING ENIGMA TO THE OBSTETRICIAN
Kermit D. Krantz, Kansas City, Kansas

THE SUSPICIOUS CERVICAL SMEAR—ITS EVALUATION BY COLPOSCOPY
Karl A. Bolten, Jackson

STERILIZATION BY ABDOMINAL OR VAGINAL TUBAL LIGATION
Phil C. Schreier, Memphis, Tennessee

POLYCYSTIC OVARIAN SYNDROME
William S. Cook, Jackson

ELECTION OF 1965 SECTION OFFICERS
The Chairman presiding (Only registered members of the section may vote)

SECTION ON PEDIATRICS

DR. WARD

Wednesday, May 13, 1964
Rose Room
Beginning at 2:00 p.m.

Mary Ward, Corinth
Chairman

Maria J. Mangold, Yazoo City
Secretary

BRIDGING THE GAP BETWEEN IMMUNOLOGY AND ALLERGY
Victor C. Vaughan, III, Augusta, Georgia

CYTOGENETICS IN CLINICAL PRACTICE
John F. Jackson, Jackson

PIONEERS IN MISSISSIPPI PEDIATRICS
Jo N. Robinson, Columbus

A MOTIVATIONAL APPROACH TO CHILD REARING
Jerome L. Schulman, Chicago, Illinois

ELECTION OF 1965 SECTION OFFICERS
The Chairman presiding (Only registered members of the section may vote)

SECTION ON GENERAL PRACTICE

DR. BANE

Thursday, May 14, 1964
Victory Room
Beginning at 9:00 a.m.

J. Roy Bane, Jackson
Chairman

Frederick C. Minkler, Jr., Pascagoula
Secretary

SYMPOSIUM ON NARCOTIC ADDICTION

I

THE DIMENSIONS OF NARCOTISM: A STUDY OF MEDICAL AND SOCIAL POLICY
John B. Howell, Jr., Canton

II

THE LEGAL ASPECTS OF PREVENTION OF NARCOTISM
Carl DeBaggio, Washington, D. C.

III

INSTITUTIONAL TREATMENT OF THE NARCOTIC ADDICT
Robert W. Rasor, Lexington, Kentucky

IV

TREATMENT OF NARCOTISM IN MISSISSIPPI
W. L. Jaquith, Whitfield

ELECTION OF 1965 SECTION OFFICERS
The Chairman presiding (Only registered members of the section may vote)

SECTION ON EYE, EAR, NOSE AND THROAT

DR. MURRY

Thursday, May 14, 1964
Rose Room
Beginning at 9:00 a.m.

Charles M. Murry, Jr., Oxford
Chairman

Emmett M. Herring, Jr., Hattiesburg
Secretary

THE TECHNIQUES OF EXTRAOCULAR MUSCLE SURGERY
William B. Clark, New Orleans, Louisiana

FACIAL PAIN
E. C. Schultz, Memphis, Tennessee

RECURRENT PTERYGIUM—PREVENTION BY TOPICAL USE OF THIO-TEPA
Thomas W. Wesson and J. Leighton Pettis, Jr., Tupelo

ELECTION OF 1965 SECTION OFFICERS
The Chairman presiding (Only registered members of the section may vote)

ESSAYISTS

DR. ANNIS

EDWARD R. ANNIS, M.D., Miami, Florida. President, American Medical Association. Medical Education: Marquette University, 1938.

DR. CLARK

WILLIAM B. CLARK, M.D., New Orleans, Louisiana. Professor, Department of Ophthalmology, Tulane University. Medical Education: Emory University, 1927. Diplomate, American Board of Ophthalmology.

DR. COTTRELL

H. B. COTTRELL, M.D., Atlanta, Georgia. Regional Director, U.S.P.H.S. Medical Education: Tulane University, 1932. Diplomate, American Board of Preventive Medicine.

MR. DEBAGGIO

CARL DEBAGGIO, LL.B., Washington, D. C. Chief Counsel, Bureau of Narcotics, U. S. Treasury Department. Professional Education: University of Iowa.

DR. DOBELLE

MARTIN DOBELLE, M.D., Washington, D. C. Bureau of Medicine, Food and Drug Administration, Department of Health, Education and Welfare. Medical Education: University of Ghent, Belgium, 1934. Diplomate, American Board of Orthopaedic Surgery.

NYLENE E. ECKLES, M.D., Houston, Texas. Medical Education: University of Minnesota, 1946.

DR. ECKLES

MR. FIELD

OLIVER FIELD, LL.B., Chicago, Illinois. Director, Department of Investigation, American Medical Association. Professional Education: University of Notre Dame.

WILLIAM H. GORDON, M.D., Lubbock, Texas. Medical Education: Medical College of Virginia, 1933. Diplomate, American Board of Internal Medicine.

DR. GORDON

DR. KEEGAN

JAMES M. KEEGAN, M.D., Houston, Texas. Medical Education: New York Medical College, 1948. Diplomate, American Board of Radiology.

KERMIT E. KRANTZ, M.D., Kansas City, Kansas. Professor and Chairman, Department of Obstetrics and Gynecology, University of Kansas Medical Center. Medical Education: Northwestern University, 1948. Diplomate, American Board of Obstetrics and Gynecology.

DR. KRANTZ

ESSAYISTS

Rev. Dr. McCleave

The Reverend Dr. Paul B. McCleave, Chicago, Illinois. Director, Department of Medicine and Religion, American Medical Association. Professional Education: University of Geneva, Switzerland, and University of Tulsa, Oklahoma.

Dr. Rasor

Robert W. Rasor, M.D., Lexington, Kentucky. Medical Director, U.S.P.H.S. Hospital, Lexington. Medical Education: University of Colorado, 1941. Diplomate, American Board of Psychiatry and Neurology.

Dr. Ray

C. Thorpe Ray, M.D., Columbia, Missouri. Professor and Chairman, Department of Medicine, University of Missouri. Medical Education: University of Texas, 1941. Diplomate, American Board of Internal Medicine.

Dr. Schreier

Phil C. Schreier, M.D., Memphis, Tennessee. Professor and Chairman, Department of Obstetrics and Gynecology, University of Tennessee Medical School. Medical Education: University of Pennsylvania, 1920. Diplomate, American Board of Obstetrics and Gynecology.

Dr. Schulman

Jerome L. Schulman, M.D., Chicago, Illinois. Assistant Professor of Pediatrics and Psychiatry, Northwestern School of Medicine. Medical Education: New York College, 1949. Diplomate, American Board of Pediatrics.

Dr. Schultz

E. C. Schultz, M.D., Memphis, Tennessee. Associate Professor of Neurological Surgery, University of Tennessee. Medical Education: University of Michigan, 1939. Diplomate, American Board of Neurological Surgery.

Victor C. Vaughan, III, M.D., Augusta, Georgia. Professor and Chairman, Department of Pediatrics, Medical College of Georgia. Medical Education: Harvard Medical School, 1943. Diplomate, American Board of Pediatrics.

Dr. Vaughan

TENNESSEE MEDICAL ALUMNI

University of Tennessee medical alumni will meet for a fellowship hour and banquet on Monday, May 11, Hotel Heidelberg Roof, beginning at 7:00 p.m. Dr. Jack K. Goodrich of Jackson is program chairman.

TULANE MEDICAL ALUMNI

Medical alumni of the Tulane University will sponsor a fellowship hour and banquet on Monday, May 11, in the Rose and Silver Rooms, Hotel Heidelberg, at 7:00 p.m. Dr. Samuel B. Johnson of Jackson is program chairman.

OLE MISS MEDICAL ALUMNI

University of Mississippi medical alumni will meet on Tuesday, May 12. Arrangements for registration at the Heidelberg have been made by alumni officials. The Nominating Committee will meet for luncheon at 12:30 p.m. A general business meeting will be held in the Hotel Heidelberg's Silver Room beginning at 4:00 p.m. A fellowship hour, buffet supper and dance will be conducted at the new Jackson Country Club, starting at 7:00 p.m., Dr. William E. Lotterhos of Jackson, president, presiding. Details and tickets may be obtained from Mr. Charles W. Price, secretary, at the University of Mississippi School of Medicine, Jackson.

WOMAN'S AUXILIARY TO THE
MISSISSIPPI STATE MEDICAL ASSOCIATION

41st Annual Session
King Edward Hotel
May 11-13, 1964

MRS. SAFLEY

OFFICERS

MRS. M. S. RIDDELL, JR.
Winona
PRESIDENT

MRS. T. J. SAFLEY, JR.
Jackson
PRESIDENT-ELECT

MRS. RIDDELL

ANNUAL SESSION CHAIRMEN

MRS. CURTIS W. CAINE
Jackson
General Chairman

MRS. JOHN R. BISE
Jackson
Publicity

MRS. FRANK A. WOOD
Jackson
Luncheon

MRS. RALPH SNEED
Jackson
Registration

Monday, May 11, 1964

1:30 p.m. Address by Edward R. Annis, M.D., President, AMA, MSMA House of Delegates, Victory Room, Hotel Heidelberg

3:00-5:00 p.m. Registration
Lobby, King Edward Hotel
Arcade, Hotel Heidelberg

4:00 p.m. Preconvention Executive Board Meeting
Walnut Room, King Edward Hotel

Tuesday, May 12, 1964

7:15-8:15 a.m. MPAC Breakfast
Roof, Hotel Heidelberg

8:00-3:00 p.m. Registration
Lobby, King Edward Hotel
Arcade, Hotel Heidelberg

9:00 a.m. General Session, Mrs. M. S. Riddell, Jr., Presiding
Coronet Room, King Edward Hotel

Invocation
Mrs. L. T. Carl, Jackson

Membership Pledge
Mrs. John G. Egger, Drew

Address of Welcome
Mrs. William L. Crouch, Jackson

Response
Mrs. J. T. Thompson, Moss Point

Presentation of Convention Chairman
Mrs. Curtis W. Caine, Jackson

Presentation of President-elect
Mrs. Thomas J. Safley, Jr., Jackson

Introductions

Greetings from John G. Archer, M.D.
President, MSMA

Greetings from Omar Simmons, M.D.
President-elect, MSMA

Greetings from A. Street, M.D.
Auxiliary Advisory Chairman, MSMA

Report of AMA Auxiliary
Mrs. A. T. Tatum, Hattiesburg

Report of SMA Auxiliary
Mrs. T. A. Baines, Jackson

Greetings from SMA Auxiliary
Mrs. Paul Gray, President
Batesville, Arkansas

Roll Call

Minutes

Recommendations of the Board

Other Business

Unit Presidents' Reports

President's Report
Mrs. M. S. Riddell, Jr., Winona

Credentials and Registration
Mrs. Ralph Sneed, Jackson

Report of the Nominating Committee
Mrs. A. T. Tatum, Hattiesburg

Election of Officers

Appointment of Delegates to AMA Auxiliary

Memorial Service
Mrs. H. C. Ricks, Jackson

Courtesy Resolution
Mrs. S. Lamar Bailey, Kosciusko

Adjournment

AUXILIARY

12:30 p.m. Luncheon
Jackson Country Club
Mrs. Frank Wood, Chairman
Mrs. M. S. Riddell, Jr., Presiding
Honoring the Reverend Dr. Paul B. McCleave, Director, AMA Department of Medicine and Religion; Mrs. William H. Evans, President-elect, Woman's Auxiliary to AMA; and Mrs. Paul Gray, President, Woman's Auxiliary to SMA

Grace
Mrs. David B. Wilson, Jackson
Introductions
Address
The Reverend Dr. Paul B. McCleave, Chicago, Illinois
Greetings from AMA Auxiliary
Mrs. William H. Evans, Youngstown, Ohio
Installation of Officers for 1964-65
Mrs. Evans
Presentation of Gavel and Pin
Response of Incoming President
Mrs. Thomas J. Safley, Jr., Jackson
Presentation of Past President's Pin
Mrs. S. Lamar Bailey, Kosciusko
AMA-ERF Awards
Mrs. Arthur E. Brown, Columbus
Announcements
Adjournment

3:30 p.m. Postconvention Executive Board Meeting and President's Workshop
Walnut Room, King Edward Hotel
Mrs. T. J. Safley, Jr., Presiding

Wednesday, May 13, 1964

7:30 a.m. Past Presidents' Breakfast
Silver Room, Hotel Heidelberg
Mrs. A. T. Tatum, Hattiesburg, Presiding

8:00-5:00 p.m. Registration
Victory Foyer, Hotel Heidelberg

9:00 a.m. Congress on Health Quackery
Victory Room, Hotel Heidelberg

6:30 p.m. MSMA Fellowship Hour
Rose and Silver Rooms, Hotel Heidelberg

7:30 p.m. MSMA Banquet and Dance
Victory Room, Hotel Heidelberg

OTHER MEETINGS

MISSISSIPPI ASSOCIATION OF PATHOLOGISTS

Hotel King Edward
Monday, May 11, 1964
ELIZABETH FERRINGTON, Jackson, *President*
WILLIAM P. FEATHERSTON, Jackson, *Secretary*

9:00 a.m. Scientific Program, Creole Room
Seminar on Pulmonary Diseases
Harlan Firininger, Baltimore, Maryland
12:00 noon Luncheon Recess
2:30 p.m. Pulmonary Sporotrichosis
Helen D. Siegrist, Jackson
Pulmonary Alveolar Proteinosis
Elizabeth Ferrington, Jackson
Various Uses of Radio-Chromium in Estimating Red Cell Survival
Warren N. A. Bell, Jackson
A Study of Hemoglobin A_2 Variations and Their Significance
Robert B. Thompson, Jackson
The Effect of Nicotine on the Chick Embryo
Robert R. Gatling, Jackson
Morphologic Changes in the Gallbladder in Experimental Shock
Charles Williams, Jackson
Prevention of Experimental Serum Nephritis
Carl G. Evers, Jackson
4:30 p.m. Business Meeting
6:00 p.m. Fellowship Hour, Kings Inn
7:00 p.m. Annual Banquet, Kings Inn

MISSISSIPPI UROLOGICAL ASSOCIATION

Hotel Heidelberg
Monday, May 11, 1964

CYRUS C. JOHNSON, Jackson, *President*
SIDNEY O. GRAVES, JR., Natchez, *President-elect*
JOEL L. ALVIS, Jackson, *Secretary*
2:00 p.m. Scientific Program, Parlor B
Homologous Renal Transplantation
Harold J. Conn, Jackson
Preperitoneal Repair of Inguinal Hernia at the Time of Open Prostatectomy
William Lamar Weems, Jackson
Pyelogram Hour
Victor F. Carey, Greenville, Moderator
4:30 p.m. Business Session
6:30 p.m. Annual Banquet, Parlor A

OTHER MEETINGS

TRAUMA CONFERENCE, AMERICAN COLLEGE OF SURGEONS

Hotel Heidelberg
Tuesday, May 12, 1964

RICHARD J. FIELD, JR., Centreville, *President*
GEORGE F. ARCHER, Greenville, *President-elect*
WILLIAM O. BARNETT, Jackson, *Secretary*

8:00 a.m. Rose Room
Paul S. Derian, Jackson, Moderator
Opening Remarks
Richard J. Field, Jr., Centreville
Emergency Care in Vascular Injuries
James D. Hardy, Jackson
Facial Injuries
James H. Hendrix, Jackson
Extremity Injuries and Their Care
George D. Purvis, Jackson
Liver, Spleen, and Pancreas Trauma
Albert L. Meena, Jackson
Management of Urological Injuries
Joel L. Alvis, Jackson
Chest Injuries
Rush E. Netterville, Jackson
Head Injuries and Their Care
Forrest T. Tutor, Jackson
Comments Regarding Orthopaedic Emergencies
Paul S. Derian, Jackson
You Can Be Sued
Jack A. Travis, Jr., LL.B., Jackson
12:00 noon Luncheon, Silver Room

MISSISSIPPI CHAPTER, AMERICAN ACADEMY OF PEDIATRICS

Hotel King Edward
Tuesday, May 12, 1964

GUY C. JARRATT, Vicksburg, *Chairman*
HOWARD H. NICHOLS, Jackson, *Alternate Chairman*
NOEL C. WOMACK, JR., Jackson, *Secretary*

12:00 noon Luncheon, Bamboo Room
2:00 p.m. Scientific Meeting
The Pediatrician and Disturbances in Parent-Child Relationships
Jerome L. Schulman, Chicago, Illinois
New Insights in Growth and Development
Victor C. Vaughan, III, Augusta, Georgia
4:00 p.m. Business Session
5:30 p.m. Fellowship Hour, Club Room
7:00 p.m. Banquet, Club Room

MISSISSIPPI SOCIETY OF ANESTHESIOLOGISTS

Members of the Mississippi Society of Anesthesiologists will meet at Jackson on Sunday, May 10, at the new Jackson Country Club at 7:00 p.m. Dr. Shih-hsun of the Columbia University College of Physicians and Surgeons, New York, will speak. Officers are Drs. Doyle P. Smith of Jackson, president; W. W. Pearson of Natchez, president-elect; and C. H. Webb of Jackson, secretary.

MISSISSIPPI ORTHOPAEDIC SOCIETY

There will be a luncheon meeting of the Mississippi Orthopaedic Society, limited to members, in the King Edward Hotel, Gold Room, on Monday, May 11, at 12:30 p.m. Officers are Drs. Thomas S. Eddleman of Jackson, president; William C. Warner of Jackson, vice president; and Edward A. Attix of Hattiesburg, secretary.

MISSISSIPPI RADIOLOGICAL SOCIETY

Radiologists will enjoy a dinner meeting in the Walnut Room, King Edward Hotel, on Monday, May 11, at 6:30 p.m. Dr. James M. Keegan of Houston, Texas, will be the speaker. Officers are Drs. Jack K. Goodrich of Jackson, president; C. D. Bouchillon of Laurel, vice president; and Daniel T. Keel, Jr., of Brookhaven, secretary.

FIFTY YEAR CLUB

Members of the Fifty Year Club will be honored at a luncheon on Tuesday, May 12, in Parlor B at the Heidelberg, at 12 o'clock noon. Dr. John B. Howell, Jr., of Canton, Vice Chairman of the Board of Trustees, will preside.

INTERNISTS AND CHEST PHYSICIANS

A joint luncheon meeting of the Mississippi Society of Internal Medicine and the Mississippi Chapter of the American College of Chest Physicians will be conducted on Tuesday, May 12, in the King Edward Hotel Club Room, at 12:15 p.m. Co-chairmen are Drs. Clinton E. Wallace for MSIM and J. L. Wofford for AACP, both of Jackson.

MISSISSIPPI DIABETES ASSOCIATION

All interested physicians are invited to an organizational meeting of the Mississippi Diabetes Association which will be conducted on Tuesday, May 12, in Parlor B, Hotel Heidelberg, at 4:00 p.m. Dr. Karleen C. Neill of Jackson is arranging the meeting.

PAST PRESIDENTS

Past presidents of the Mississippi State Medical Association and Woman's Auxiliary, respectively, will enjoy breakfast meetings on Wednesday morning, May 13, at the Hotel Heidelberg. MSMA past presidents will meet in Parlor A and those of the Auxiliary, in the Silver Room, both at 7:30 a.m.

MISSISSIPPI OB-GYN SOCIETY

Members of the Mississippi Ob-Gyn Society will meet on Wednesday, May 13, in the Silver Room, Hotel Heidelberg, for a fellowship hour and luncheon beginning at 11:30 a.m. Officers are Drs. John T. Kitchens of Jackson, president; Chester H. Lake of Jackson, vice president; and John E. Lindley of Meridian, secretary.

INTERNATIONAL COLLEGE OF SURGEONS

Fellows of the International College of Surgeons will enjoy a luncheon meeting on Wednesday, May 13, in the Creole Room, King Edward Hotel, at 11:45 a.m. Officers are Drs. J. P. Culpepper, Jr., president; H. Grady Cook, president-elect; and Willis Walker, secretary, all of Hattiesburg.

FLYING PHYSICIANS ASSOCIATION

Mississippi members of the Flying Physicians Association and nonmember physicians interested in private flying will meet at luncheon on Wednesday, May 13, in the Walnut Room, King Edward Hotel, at 12 o'clock noon. Officers are Drs. Richard F. Riley of Meridian, chairman; James L. Royals of Jackson, co-chairman; and Samuel B. Johnson of Jackson, secretary.

SOUTHERN MEDICAL ASSOCIATION

An invitational breakfast meeting of Southern Medical Association officials and guests will be conducted on Thursday, May 14, Hotel Heidelberg Roof, at 7:30 a.m. Dr. Howard A. Nelson of Greenwood, SMA councilor, is host.

MAGP LUNCHEON

The Mississippi Academy of General Practice will sponsor a luncheon on Thursday, May 14, Hotel Heidelberg Roof, beginning at 12 o'clock noon. Officers are Drs. Lawrence H. Brisco of Tupelo, president; Frank C. Massengill of Brookhaven, president-elect; Max L. Pharr of Jackson, secretary; and Miss Louise Lacey of Jackson, executive secretary.

SECTION ON EENT LUNCHEON

The Section on Eye, Ear, Nose, and Throat will sponsor its annual luncheon on Thursday, May 14, in the Silver Room, Hotel Heidelberg, at 12 o'clock noon. A business meeting of the Mississippi EENT Association will follow the luncheon.

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume V, Number 4

April 1964

The New Dimensions of the Pharmaceutical Industry

I

The making and marketing of drugs in the United States is undergoing subtle but profound change. Research effort is up, but new product introductions are down. Marketing techniques are taking new shapes, while sales of old items increase. There are fewer manufacturers than there were five years ago, but their corporate health has never been better.

These are some of the findings reported by the New York drug industry consultant, Paul de Haen, in *Drug Trade News*. Analyzing trends in the pharmaceutical manufacturing field during 1963, de Haen said that only 16 single chemical entities, not previously available to physicians, were introduced. This marked the fifth consecutive year of decreasing additions to the chemotherapeutic armamentarium, down from 63 new entities made available in 1959. A fourth of the new products came from Europe.

Of the 16, seven were new and original chemical entities. Seven others were derivatives of previously known substances. One was a new salt of an old chemical, and one turned up as a new use for a compound formerly on the laboratory shelf. Eleven were the results of the manufacturers' own private research, and the therapeutic use of one entity was discovered by an independent scientist.

II

De Haen's studies recorded 1,063 references in the 1963 literature to new discoveries and additional uses for existing drugs. He reported publication of 1,643 papers on 784 products, a sure indicator, he contends, of substantial additions to the enormous fund of scientific knowledge. The report disclosed that, in addition to the 16 new discoveries, there were also marketed 34 duplicate drug products, 149 new compounds, 14 biologicals, and 52 new dosage forms.

But the characteristics of the industry are changing with a distinct movement toward bigness and the diversified corporate family. It's astonishing to note that 60 producers of pharmaceuticals are either divisions or wholly owned subsidiaries of other companies. With corporate acquisitions a top objective of the business community, de Haen observed that movement of ownership hasn't always been beneficial. Familiar company names have sometimes disappeared, development programs have been interrupted, and many personal contacts with the medical profession have been lost. The latter, de Haen says, is "one of the main assets of a pharmaceutical manufacturer."

The number of drug makers reported in the 1963 study was 89, in contrast with 127 in 1957. That year, 400 new products were introduced against 199 last year. But there's more to the story, because these summaries relate only to ethical prescription items. Some manufacturers have established new units which advertise and market proprietary drugs to the public.

III

The report carries a note of caution, although the respected consultant reserves judgment as to good or harm which may emerge from the trends. He candidly feels that the effects of the decreasing number of manufacturers remains to be seen. He warns that research conducted on too broad a scale may hamper productivity, "because management guidance and supervision becomes too complex."

The industry periodical quotes de Haen as believing that the success of subsidiaries in marketing prescription items depends in large measure upon the autonomy given by parent corporations. He hints that these may be factors in the drought of new products.

The same issue of *Drug Trade News* carries an interesting note of concomitant importance. Referring to a recent report by Bache and Company, it points out that the drug makers' economic health is sound and that "the industry can sustain a growth rate in earning of 7 to 9 per cent over the next several years."

IV

All of this has significance for the clinician who is dependent upon this viable sector of the industrial community for much of the means with which he treats his patients. It is unlikely, despite the changes taking place, that the physician will find himself at serious disadvantage for want of drugs representing the present level of scientific knowledge. He has much more to fear from government than from corporate metamorphosis.

The 1962 drug laws have had a telling effect, because the pendulum swung sharply in requiring proof of efficacy as well as safety. Research and development, never a penny ante operation, is more expensive, and costs of marketing new prescription items are up. Pharmaceutical advertising in scientific journals has been slashed deeply, and whether it's an outgrowth of the industry's new posture or merely the hope of economic advantage in the throwaway publications, valuable and necessary scientific communications media have had to sacrifice size and variety for selectivity.

Medicine and pharmacy sorely need each other, if the maximum service potential of each is to be realized. More aptly, the patient needs this team. The profession has recognized this need, because the American Medical Association has just recently sponsored the first national meeting of medicine and pharmacy. Moreover, AMA is undertaking important studies in this area. Such recognition, it becomes obvious, can prevent tragic consequences which are a latent hazard in a change which must finally benefit the goal of healing.—R.B.K.

The USA Puffs Away

What American smokers know about the scientific community's view on tobacco and health apparently isn't shaking them up enough. In its recent monumental report, the Surgeon General's Advisory Committee stated that per person cigarette consumption—excluding those under 15 years of age—had risen to 3,958 in 1962 from a scant 49 in 1900. The committee found that use of pipe and chewing tobacco, as well as snuff, declined during the same period.

Comes now the figures for 1963 which were not available to the committee, and it's beginning

"You shouldn't have tried to carry all of them across the threshold."

to look as though the nation is about to go up in a puff of smoke. Domestic consumption of cigarettes rose 3.1 per cent to a new high of 509.6 billion in 1963, according to the Tobacco Merchants Association. And the lordly cigar has new status, too, because more were sold than in any year since 1923. The 40 year high was almost 7.17 billion, a lot of stogies. Use of the cigarette-size cigars went up, too, for the second consecutive year.

The Surgeon General's committee found that the per capita tobacco consumption is now almost 11 pounds annually. The committee sincerely believes that its use constitutes a health hazard. And what's more interesting is that the same government which sponsored the committee's studies has a Department of Agriculture passing out subsidy checks to tobacco farmers and showing them how to increase their crop yields. Got a match?—R.B.K.

A Modicum of Relief

The recently enacted tax cut bill, rather obviously election year vote bait, was greeted with mixed emotions by many Americans. Most supporters of sound, conservative government believed that the nation ought to live within its income and get out of areas where the federal level has no proper role to fulfill. The best expression of this view came from Sen. Harry F. Byrd (D., Va.). But it's an ill wind that blows no good, and that goes for the tax cut, however prudent or unwise it was for whatever reasons.

Two proposals, long advocated by American medicine, for the benefit of the ill and injured, were included in the omnibus measure. The first excuses a person over age 65 from the requirement of reducing the amount paid for drugs by 1 per cent of gross income before claiming the deduction. Second, the new law provides that if a taxpayer's sick pay is less than 75 per cent of his weekly wage, he may deduct up to $75 per week immediately if hospitalized or after seven days if confined to home. After 30 days, he may deduct up to $100 per week.

Those and other suggestions yet to be incorporated in federal tax law have been proposed by AMA with the objective of helping the sick to help themselves. It's a step toward further proof that given a modicum of relief from confiscatory taxation, Americans are glad enough to provide for themselves.—R.B.K.

LETTERS

SIRS: Let me congratulate your association for furnishing a nurse and doctor at the Capitol. I think this is a wonderful gesture on your part, and it has proven very valuable during this session of the Legislature.

PAUL B. JOHNSON
GOVERNOR
STATE OF MISSISSIPPI
JACKSON, MISS.

SIRS: I want to tell you how much I appreciate the "Doctor of the Day" program for the Mississippi Legislature. This has been one of the most popular and useful things done for the members and has caused a great deal of very favorable comments. All of us are most grateful for this service. Please accept our sincere thanks for this service.

CARROLL GARTIN
LIEUTENANT GOVERNOR
STATE OF MISSISSIPPI
JACKSON, MISS.

SIRS: Thank you very much for your recent contribution to the LSU School of Medicine through the American Medical Association Education and Research Foundation. We are facing many expansion problems and without the supplementary income received through AMA-ERF, we would be at a loss to improve our existing program and would actually have to curtail some of our school activities. Your support is of great value to us and we want you to know how much we appreciate it.

WILLIAM W. FRYE, PH.D., M.D.
VICE PRESIDENT AND DEAN
LOUISIANA STATE UNIVERSITY SCHOOL OF MEDICINE
NEW ORLEANS, LA.

On behalf of all MSMA members, many thanks to Dean Frye for his gracious expression. Every physician has an active interest in voluntary support of medical education by private means.—The Editors.

DEATHS

BANKS, WILLIAM HENDERSON, Philadelphia. M.D., Memphis Hospital Medical College, Tenn., 1909; Emeritus member of MSMA and member of the Fifty Year Club; died Feb. 7, 1964, aged 85.

BUSBY, EUGENE SPENCER, Hattiesburg. M.D., University of Illinois College of Medicine, Chicago, 1931; interned West Suburban Hospital, Oak Park, Ill., one year; member Hattiesburg Clinical Society; past president of South Mississippi Medical Society; died Feb. 3, 1964, aged 58.

MAGEE, MARCUS MANLY, Magee. M.D., Memphis Hospital Medical College, Tenn., 1902; interned Tulane University School of Medicine, New Orleans, La., one year; died Feb. 13, 1964, aged 88.

RAMSEY, FRANK LEWIS, Laurel. M.D., University of Tennessee College of Medicine, Memphis, 1935; interned Jackson Memorial Hospital, Miami, Fla.; urology fellowship, Tulane University School of Medicine, New Orleans, La., two months; member, Board of Directors of Southeastern Section American Urological Association, Southeastern Surgical Congress, and Gulf Coast Clinical Society; past president, South Mississippi Medical Society; former vice president of MSMA; died Feb. 17, 1964, aged 51.

PERSONALS

PAUL C. ELLZEY of Booneville recently received the Award of Honor for outstanding volunteer service to the Red Cross Birmingham Regional Blood Program. Dr. Ellzey received the organization's highest award for the development of a workable plan for the sub-distribution station at Booneville and the supervision to insure efficient and economical operation of the station.

LAMAR H. GILLESPIE of Hattiesburg has been elected a Fellow of the American College of Obstetricians and Gynecologists.

JAMES D. HARDY, professor and chairman of the department of surgery, University of Mississippi School of Medicine, spoke recently in New York at the Sixth International Conference on Tissue Transplantation sponsored by the New York Academy of Sciences. Dr. Hardy's topic concerned details of the recent heart transplant at the University Medical Center.

FREDERIC C. MCDUFFIE of Jackson has been named to the 1964 campaign committee of the Arthritis and Rheumatism Foundation, Mississippi Chapter.

MAURY H. MCRAE of Corinth and AUGUSTUS STREET of Vicksburg, both Illinois Central district surgeons, have been awarded lifetime passes on the railroad for their 40 years of service to the railroad's employees.

ALBERT L. MEENA, WILLIAM A. NEELY, and W. C. SHANDS, all of the University of Mississippi School of Medicine, were featured speakers at the first session of UMC's Central Circuit courses in Centreville and Meridian. Dr. Meena, clinical instructor in surgery, discussed disease of the pancreas; Dr. Neely, associate professor of surgery, spoke on the guises of lung cancer, and Dr. Shands, clinical assistant professor of surgery, talked about various kinds of cancer.

DANIEL H. MOORE, SR., of Meridian has announced the association of his son DANIEL H. MOORE, JR., in the practice of medicine limited to medical and surgical diseases of the eye. Dr. Dan Moore, Jr., received his medical degree from Harvard Medical School, Boston, Mass., interned at the University of Mississippi School of Medicine, and served a residency at the Cincinnati General Hospital, Cincinnati, Ohio.

HUNTER L. SCALES has been awarded a Certificate of Appreciation in recognition of his fifteen years of service as Medical Advisor for the local Selective Service Board No. 57, Oktibbeha County, Starkville, Miss.

THOMAS L. SWEAT has been elected president of the Corinth Rotary Club.

WILLIAM B. WIENER has been elected to the Board of Trustees of the United Givers Fund Organization of Jackson for the 1964 campaign.

WILLIAM T. WILKINS has been reappointed to the Clarksdale City School Board. Dr. Wilkins also serves as the board's vice-president.

DAYTON E. WHITES of Lucedale was recently awarded the George County Jaycees' Distinguished Service Award.

Book Reviews

Electrocardiography: Fundamentals and Clinical Application. Third Edition. By Louis Wolff, M.D., visiting physician, consultant in Cardiology and Head of the Cardiographic Laboratories, Beth Israel Hospital; Clinical Professor of Medicine, Harvard Medical School. 351 pages with illustrations. Philadelphia: W. B. Saunders Company, 1962. $8.50.

This volume is a well written study of the subject for the serious student or internist. It probably should be prefaced for a beginner with one of the several excellent "Primers" of electrocardiography.

In the first part, technical details are a bit difficult to read without concentrating carefully. Part two, clinical electrocardiography, is well presented although the detailed study of the abnormal tracings may appear complicated to a beginner. The material on vectorcardiography is well presented and is worth the price of the book. The abnormal rhythm section and the section on effects of digitalis and quinidine are well written and illustrated making it an excellent reference book.

In summary it is a good reference for anyone using electrocardiography or who wishes to make a serious study. While a beginner could get his entire instruction from it, an introduction in a less technical book would probably make reading electrocardiography easier and more enjoyable.

WILLIAM R. MITCHUM, JR., M.D.

Organization and Administration in World War II. Prepared by the Medical Department of the United States Army with Colonel John Boyd Coates, Jr., M. C., editor in chief, and Charles M. Wilke, editor for organization and administration. Washington: Office of the Surgeon General, Department of the Army, 1963. $6.25.

This is one of the very fine volumes comprising the official history of the Medical Department of the U. S. Army in World War II. These historical volumes are prepared by The Historical Unit, U. S. Army Medical Service, Colonel John Boyd Coates, Jr., MC, USA, Director. The volumes are divided into the administrative series and the clinical series. *Organization and Administration in World War II* is the second volume in the administrative series.

In the foreword it is emphasized that in World War II the Army Medical Service had to expand from supporting a peace time army of 200,000 men to providing the best in medical and surgical care for more than 8,000,000. The method of organization to accomplish this mission is the theme of the book.

The volume begins with an account of organizational structure in the fall of 1939. The rapid expansion of the medical service, bringing out rival demands from military and civilian interests, is described in detail. Great stress is placed on hardships which the Medical Department had to endure because of a War Department reorganization which placed the Medical Department under the Services of Supply. It was not until 1946 that the Surgeon General was restored to a position on the War Department special staff.

The book might be said to be divided roughly into two parts. The first six chapters deal with organization and administration of Army medical service in the office of the Surgeon General or in areas immediately under his supervision. The second group of chapters, seven through twelve are related to the various theaters of war operations such as the European Theater and the Southwest Pacific Area.

The volume is a very valuable reference edition. The author presents a detailed accounting of historical facts in an interesting and readable fashion. One would not casually read the material for pleasure but would find it necessary and desirable to study the various pages. As the title would indicate the book would probably be of most interest to one concerned with administration and organization.

Anyone who has been concerned with medical administration either in the Army or out will find it interesting reading. The presentation will immediately impress the administrators with the problems one encounters in attempting to set up and operate an organization involving so many people. This situation is further complicated by the bringing together of large numbers of highly intelligent members of various professions related

to the field of medicine and having to integrate them into the military scheme of things.

The author makes no effort to offer criticisms or solutions of problems encountered. The presentation of facts brings out clearly that a strongly motivated professional group can develop an organization and make it work as far as adequate medical care is concerned, regardless of the many obstacles encountered.

Even those individuals with limited time for reading will find it easy to look up the chapter dealing with the World War II Theater of Operations in which he operated to find out why he had so many "gripes" during his army tour of duty.

DAVID B. WILSON, M.D.

Fundamentals of Blood Coagulation in Clinical Medicine. By Cecil Hougie, M.D., Associate Professor in Pathology, University of Washington, Hematology Director, Clinical Laboratories, University Hospital, Seattle, Washington. 303 pages with illustrations. New York: McGraw-Hill Book Company, Inc., 1963. $11.95.

This is a very explicit and much needed book on the clinical aspects of coagulation problems. Although a small appendix of technical methods is included, the book itself deals primarily with the interpretation of the coagulation tests outlined and clinical details with regard to the coagulation diseases themselves. The book is well written and approaches the problem with a good historical review and then approaches the clinical investigation of a coagulation problem in a well organized fashion. The remarks with regard to therapy of coagulation diseases are up-to-date and should provide a useful reference guide to any clinician concerned with such a patient.

There is a very good chapter on the uses and abuses of the prothrombin time in the control of Coumarin-Indanedione drug therapy. Some of the limitations of these problems are well outlined, and some intriguing thoughts with regard to development of further tests are included. This book was written by a man who has had good clinical experience with coagulation problems, and I highly recommend it to those who encounter coagulation problems commonly in their practice. The book is concise, well written, and well indexed so that details can be quickly recalled when necessary.

WARREN N. BELL, M.D.

Books Received

Outline of Electrocardiography. By H. Harold Friedman, M.D., Assistant Clinical Professor of Medicine, University of Colorado Medical Center; Attending Physician and Electrocardiographer, General Rose Memorial Hospital, Denver; Attending Cardiologist, National Jewish Hospital and Veterans Administration Hospital, Denver. 290 pages with illustrations. New York: McGraw-Hill Book Company, Inc., 1963. $5.95.

Mechanisms of Demyelination. Edited by Augustus S. Rose, M.D., and Carl M. Pearson, M.D. New York: McGraw-Hill Book Company, Inc., 1963. $13.50.

Current Pediatric Therapy. By Sydney S. Gellis, M.D., Professor of Pediatrics and Chairman of the Department of Pediatrics, Boston University School of Medicine; Director of Pediatrics, Boston City Hospital, and Benjamin M. Kagan, M.D., Director, Department of Pediatrics, Cedars of Lebanon Hospital, Los Angeles; Clinical Professor of Pediatrics, University of California, Los Angeles. 747 pages. Philadelphia: W. B. Saunders Company, 1964. $16.00.

Appraisal of Current Concepts in Anesthesiology. Volume 2. Edited by John Adriani, M.D., Professor of Surgery, Tulane University School of Medicine, New Orleans, La.; Clinical Professor of Surgery and Pharmacology, Louisiana State University School of Medicine, New Orleans, La.; Director, Department of Anesthesiology, Charity Hospital of Louisiana, New Orleans, La. 478 pages. St. Louis: The C. V. Mosby Company, 1964. $10.75.

Principles of Public Health Administration. 4th edition. By John J. Hanlon, M.D., Director of Community Health Services, City of Philadelphia; Professor and Chairman, Department of Preventive Medicine and Public Health, Temple University School of Medicine, Philadelphia, Pa. 719 pages with illustrations. St. Louis: The C. V. Mosby Company, 1964. $11.50.

Pediatric Therapy. First edition. By Harry C. Shirkey, M.D., Director, The Children's Hospital of Birmingham, Associate Professor of Pediatrics, Medical College of Alabama, Birmingham, Professor of Pharmacology, Howard College, Birmingham. 1144 pages with illustrations. St. Louis: The C. V. Mosby Co., 1964. $16.50.

Kerr-Mills Measure Is Introduced In Legislature With Association Support

A bill to implement the Kerr-Mills program in Mississippi, often described as the association's number one legislative objective, was introduced in the 1964 Regular Session by Sen. Walter V. Moore of Oakland. Dr. William E. Lotterhos of Jackson, chairman of the Council on Legislation, said that the measure, Senate Bill 1726, included "all essentials of Kerr-Mills implementation sought by the association as approved by our council, the Board of Trustees, and House of Delegates."

In a statement to the senate and press on March 9, Sen. Moore, whose committee has been concerned with legislation of this nature, said that "because of a deep and continuing concern for helping those Mississippians over age 65 who need help in a climate of voluntarism with local —not federal—administration, I have urged enactment of this program.

"The Kerr-Mills law," he added, "enables the individual states to assure every aged citizen the health care he requires."

The senator said he was impressed by Kerr-Mills characteristics of voluntarism without compulsion, the state's ability to determine the extent of the program and services which would be made available, helping only those who need help, local administration by and in the state, and economy of operation with assurances of highest quality of care.

Dr. Lotterhos pointed out that since 1961, a program of hospital care had been operating in the state for those over 65 who receive Old Age Assistance under public welfare. He said that this involved an eligibility group of about 76,000 citizens of approximately 192,000 in that age bracket. Only a fraction would require assistance under the proposed Medical Assistance to the Aged (MMA), he said.

Sen. Moore pointed out that "implementation of Kerr-Mills, already enacted by 40 states and made operational in 30, will permit us to assist those citizens over age 65 who are not receiving public assistance but whose resources barely cover their food, shelter, and clothing needs and who may need help in providing for part or all of their care in the event of major illness.

"Enactment of this proposal will be a declaration by Mississippians that we intend to take care of our own when they need help. We will prevent an expansion of the welfare rolls and preserve the economic independence—however modest it may be—of those whose productive years have largely ended," he declared.

The bill is consistent with the special study of the Council on Medical Service adopted by the House of Delegates at the 95th Annual Session in 1963. It provides for flexibility in offering services within the framework of the state's financial capa-

Sen. Walter Moore of Oakland, left, sponsor of SB 1726, implementation of the Kerr-Mills program in Mississippi, discusses his bill with Dr. William E. Lotterhos of Jackson, association legislative chairman.

bilities, a means test for applicants, and a medical advisory committee from the association to assist the administering agency.

Following introduction by Sen. Moore at the end of the session's ninth week, SB 1726 was referred to the senate Committee on Finance. The body consists of Sens. Ellis B. Bodron of Vicksburg, chairman, Tom Douglas of Hazlehurst, vice chairman, Bill Caraway of Leland, R. B. Reeves of McComb, W. M. Smith of Natchez, G. V. Montgomery of Meridian, P. M. Watkins of Port Gibson, Paul Lee of Carthage, E. K. Collins of Laurel, Merle Palmer of Pascagoula, Cecil L. Sumners of Iuka, Noel Monaghan of Tupelo, Hayden Campbell of Jackson, Herman DeCell of Yazoo City, John Clark Love of Kosciusko, John Powell of Liberty, and the sponsor, Walter V. Moore of Oakland.

All 54 state and territorial medical associations of the AMA support the Kerr-Mills program. MSMA's House of Delegates first voted its endorsement of the law in 1961, considered it again in 1962, ordering a study of implementation in the state which was adopted in 1963. The present bill has been coordinated with local societies and is strongly supported by the association.

Dr. Nelson Named To Top AMA Post

Dr. Howard A. Nelson of Greenwood has been named to the new seven member Commission on Medical Practice of the American Medical Association. The appointment was tendered by the Board of Trustees, the announcement said. The new body will study and recommend methods for the better distribution of knowledge and skills by the medical profession to provide more adequate availability of personal physicians.

A first task will be an evaluation of the current methods of purveying health care by physicians. Influences upon these methods, the demands and needs of the public, and interests of doctors themselves will be considered. The commission will be served by a special staff based at AMA's Chicago headquarters.

Dr. Nelson is a past president of the association and a former member of its Board of Trustees. He currently serves as vice speaker of the House of Delegates and for 17 years has been secretary of the Delta Medical Society. He is vice chairman of the AMA Committee on Maternal and Child Care.

State Officers Visit East Medical Society

Dr. John G. Archer of Greenville, MSMA president, and Dr. George E. Twente of Jackson, chairman of the Mississippi Political Action Committee, addressed the February meeting of the East Mississippi Medical Society. They are shown with society officers and MSMA officials. From left to right front row are Dr. Prentiss F. Keyes of DeKalb, president of East Society; Dr. Archer, and Dr. Omar Simmons of Newton, MSMA president-elect. On the back row are Dr. Wayne Sullivan of Meridian, secretary of East Society; Dr. Twente, Dr. Guy T. Vise of Meridian, chairman, Council on Medical Service, and Dr. Lamar Arrington of Meridian, district trustee.

Blue Cross-Blue Shield Elects Board Members

Drs. Walter H. Simmons of Jackson and Andrew K. Martinolich, Jr., of Bay St. Louis have been elected to the Board of Directors, Mississippi Hospital and Medical Service, Jackson. H. Dean Andrews, administrator of Vicksburg Hospital, Inc., was also named, according to an announcement by Richard C. Williams, who was re-elected president of the Board.

Other officers re-elected by the Board at the recent meeting include: W. W. Hollowell, Greenville, chairman; Owen Cooper, Yazoo City, vice-chairman; Tom G. Gibson, Jackson, secretary-treasurer, and T. Harvey Hedgepeth, Jackson, legal counsel.

Mr. Williams also presented to the group Blue Cross-Blue Shield's 1963 annual report. Among the highlights of this report are a new high in

membership of 421,678 Mississippians, a total of almost $17,000,000 paid out for members' hospital-surgical-medical claims, 207,810 hospital and physicians' claims processed, and the payment for over 535,000 days of hospital care.

"During 1963, Blue Cross-Blue Shield concentrated its efforts on providing broad health care protection through flexible programs designed for employee groups, individuals, families, and senior citizens aged 65 and over," Williams stated. The plan paid over $319,000 for Mississippi taxes last year.

Mid-South Elects New Officers

Dr. J. T. Davis of Corinth was elected 1964 vice president for Mississippi at the recent 75th annual meeting of the Mid-South Postgraduate Medical Assembly which convened at the Peabody Hotel in Memphis. Dr. J. P. Price of Monticello, Ark., assumed the presidency succeeding Dr. Stanley A. Hill, also of Corinth.

Other officers named were Dr. Moore Moore, Jr., Memphis, president-elect; Dr. Henry G. Rudner, Jr., Memphis, secretary-treasurer; Dr. James C. Embry, West Paducah, Ky., Dr. Lyle Hyatt, Covington, Tenn., and Dr. Jack Kennedy, Arkadelphia, Ark., vice presidents for their respective states.

Dr. John G. Archer of Greenville, left to right, MSMA president and 1952 president of the Mid-South Postgraduate Medical Assembly, reviews the group's February program with Dr. J. P. Price of Monticello, Ark., incumbent president, Dr. Stanley A. Hill of Corinth, 1963 president, and Dr. C. W. Patterson of Rosedale, 1958 president.

Dr. Grenfell Named WMA State Chairman

A release from the United States Committee of the World Medical Association names Dr. Raymond Grenfell of Jackson 1964 state chairman for Mississippi.

According to Dr. Gerald Dorman, secretary-treasurer of the Committee, chairmen will be responsible for directing programs and activities of the U. S. Committee in their states, and they will also conduct state-wide campaigns to increase individual physician membership in the Committee.

The World Medical Association is an organization of national voluntary medical associations in 58 countries of the free world representing over 700,000 physicians. The United States Committee of WMA supports it's professional and scientific activities.

Dr. Edward R. Annis, president of the American Medical Association, is currently serving as president of WMA.

UMC Eye Bank Now In Operation

The University of Mississippi School of Medicine has recently established an eye bank for the storing of corneas to be used in corneal transplant surgery, according to a report from UMC.

"Time has always been a vital factor in using good corneas to replace bad," states Dr. Harvey Wright, ophthalmology resident physician at the Center and director of the eye bank. "First the bank must get the cornea within two hours after the donor's death, then keep it under refrigeration and use it within 48 hours for a fresh graft," Dr. Wright reports.

The new eye bank makes possible the saving of corneas for as long as a year through a process of dehydration. This accessible supply of corneas will help those waiting for the procedure and will permit emergency surgery for future patients suffering injuries to corneal tissue.

Funds for the bank were donated by the Jackson Lions Club through a legacy from Dr. Sam J. Hooper, deceased Jackson physician.

Mississippians Queue Up For 'Sugar on Sunday'

A sampling of newspaper clippings from around the state shows that Mississippians from Laurel to Tupelo are queuing up for their vaccine-coated sugar cubes.

Sponsored by local medical societies, hospitals, and civic groups, Sabin Oral Sunday campaigns are currently being conducted in a number of counties including Oktibbeha, Pike, Tallahatchie, Jones, Warren, Claiborne, Issaquena, Sharkey, Panola, Franklin, West Tallahatchie, Bolivar, Humphreys, Webster, Leflore, Montgomery, Washington, Lee, Holmes, West Chickasaw, Hinds, Leake, Madison, Rankin, Scott, Simpson, Smith, Yazoo, Forrest, Lamar, Pearl, and Perry.

Largest of the campaigns was that conducted by the Central Medical Society in its eight county area of 365,000 persons. The first Sabin Oral Sunday brought out a total of 301,667, and the second Sunday drew 302,253. Percentage-wise, 82.6 per cent of the pertinent population received immunization on the first Sunday and 82.8 on the second Sunday.

State papers publicized the campaigns through features, editorials, and cartoons. Wrote Dr. Mark Hartley of Sardis in the Batesville *Panolian,* "Please don't let us have to go through an epidemic of polio to become awakened to the fact that we are hopelessly bathed in a sense of false security about our protection against this dread disease. . . . Remember S.O.S., the national distress signal, is given to point the way to a new way of life free from polio. . . ."

The *Delta Democrat-Times* told its readers, "Yesterday the first of three Sabin Oral Sundays marked a real triumph on both a local and national level for the democratic process and the free enterprise system. A large percentage of the population of Washington County will be immunized against the crippling disease poliomyelitis because the community has accepted its responsibility for its member citizens. . . . If Washington County and all its neighbor counties throughout the United States continuously assumed to so great a degree the responsibility for the welfare of the community and its citizens, there would never need be the threat of 'creeping socialism' or 'overcentralization.' The S.O.S. example is one we should remember in the future."

Cartoonist for the *Holmes County Herald* publicized the campaign dramatically with a tombstone inscribed, "Here Lies Polio—crippler, killer, menace. Born ?? Died 1964. Slain by S.O.S."

And although "died" was perhaps an optimistic term, it is interesting to note that in February, the National Polio Foundation was able to announce for the first time since its establishment in 1938 that no polio case was reported in the United States for three weeks. The week ending Jan. 4 was the initial breakthrough on absence of polio. "Zero" weeks were also reported for Jan. 18 and Feb. 1.

But it remained for the *Starkville Daily News* to express the complete public acceptance of this painless way of vaccination. Paraphrasing the familiar S.O.S., the *News* headlined, "Sugar on Sunday to Open March 1."

Central Medical Society officials keep track of the Sabin Oral Sunday participation. From the left are Dr. Raymond S. Martin, chairman of the manpower committee; Dr. Durward Blakey, chairman of records and surveillance, and Dr. Raymond F. Grenfell, chairman of publicity.

Board Approves Nursing Schools

Ten schools of nursing in Mississippi have received formal approval for accreditation during 1964 by the Board of Trustees of Institutions of Higher Learning. The announcement, made by Annie M. Tucker, R.N., the board's nursing education consultant, said that the group included seven hospital diploma schools, two schools offering associate degree programs, and one conferring baccalaureate degrees in nursing.

Hospital diploma schools approved are Mississippi Baptist Hospital of Jackson, Greenwood Leflore Hospital of Greenwood, Matty Hersee Hospital of Meridian, Mercy Hospital-Street Memorial of Vicksburg, Methodist Hospital of Hattiesburg, South Mississippi Charity Hospital of Laurel, and St. Dominic-Jackson Memorial Hospital of Jackson.

The Northeast Mississippi Junior College of Booneville and Perkinston Junior College of Perkinston were approved for associate degree programs. The University of Mississippi School of Nursing, located in the medical center complex at Jackson, is approved for the baccalaureate degree program.

The approvals granted by the board establish the eligibility of the respective graduates to be examined by the State Board of Nurse Examiners for the R.N. Since 1954, the board has been responsible for the approval function under state law.

MSMA Guests Welcome At Congress on Quackery

Members of the Mississippi State Medical Association are encouraged to invite interested friends to the Congress on Health Quackery, a highlight special feature of the 96th Annual Session in Jackson, May 11-14, 1964.

This was the joint announcement of Dr. John G. Archer, president, and Dr. C. G. Sutherland, chairman of the Council on Scientific Assembly.

Appearing on the program will be Dr. Martin Dobelle of Washington, D. C.; Oliver Field of Chicago, Ill., and Dr. William H. Gordon of Lubbock, Texas.

A graduate of the University of Ghent, Belgium, Dr. Dobelle will represent the Bureau of Medicine, Food and Drug Administration, Department of Health, Education and Welfare. He is a Diplomate of the American Board of Orthopaedic Surgery.

Mr. Field is director of the Department of Investigation of the American Medical Association. He received his LL.B. degree from the University of Notre Dame.

A Diplomate of the American Board of Internal Medicine, Dr. Gordon was graduated from the Medical College of Virginia. He is nationally known for his lectures on quackery.

Dr. Sutherland will preside over the congress, and Dr. Archer will give the keynote address.

Prior notice of attendance by guests of MSMA members is not necessary. The congress will begin at 9:00 a.m. on Wednesday, May 13, in the Victory Room of the Heidelburg Hotel.

Special adjunctive exhibits on health quackery sponsored by the American Medical Association and the U. S. Food and Drug Administration may be viewed in the Olympic Room.

The Congress on Health Quackery is only one special feature of the tightly scheduled 96th Annual Session. Other programs include those of the Sections on Medicine, Surgery, Preventive Medicine, Obstetrics-Gynecology, Pediatrics, General Practice, and Eye, Ear, Nose, and Throat.

Meeting concurrently with MSMA will be 15 specialty societies and three alumni groups. The 41st Annual Session of the Woman's Auxiliary to MSMA will convene May 11-13.

Speakers Call For Resolutions

A call for resolutions to be considered by the House of Delegates at the 96th Annual Session was issued this week by the speaker and vice speaker. Drs. B. B. O'Mara of Biloxi and Howard A. Nelson of Greenwood urged local medical societies and individual delegates having matters to present in resolution form to submit them at once.

"Resolutions should be sent to the association's headquarters office at Jackson," the House officials said, "so that they may be printed in advance of the annual session and made available to delegates at registration."

The House will meet at 1:30 p.m. on May 11 at which time resolutions will be introduced. Final action will come on May 14 after the proposals have been discussed in the various reference committees.

W. B. Saunders Announces Recent Publications

W. B. Saunders company features the following recent books in their full page advertisement appearing elsewhere in this issue:

AVERY—THE LUNG AND ITS DISORDERS IN NEWBORN INFANTS

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CECIL-CONN—THE SPECIALTIES IN GENERAL PRACTICE

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NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

Arnold, Godfrey Edward Thomas, Jackson. Born Olmuetz, Austria, Jan. 6, 1914; M.D., Vienna University Medical School, Austria, 1937; interned Vienna General Hospital, one year; otolaryngology residency, Vienna University Medical School, Austria; member American Academy of Ophthalmology and Otolaryngology; the American Laryngological, Rhinological, and Otological Society; The American Laryngological Association; the American Speech and Hearing Association; New York Eye and Ear Infirmary Alumni Association; New York Society for Voice and Speech Therapy; International Association of Logopedics and Phoniatrics; German Otolaryngologic Society; German Phoniatric Society; Italian Society for Phonetics, Phoniatrics, and Audiology; certified by the American Board of Otolaryngology; presently a consultant with the National Institutes of Health, Public Health Service, and associate professor of surgery (otolaryngology) and chief, Division of Otolaryngology, University of Mississippi School of Medicine, Jackson; elected Jan. 7, 1964, by Central Medical Society.

Bridges, Berly Elliot, Jr., Jackson. Born Temple, Tex., Sept. 20, 1925; M.D., University of Texas Medical Branch, Galveston, 1955; interned St. John's Episcopal Hospital, Brooklyn, N. Y., one year; residencies, University of Minnesota Medical School, Minneapolis; Walter Reed General, Washington, D. C.; and Fitzsimons General, Denver, Colo.; presently assistant professor anesthesiology, University of Mississippi School of Medicine, Jackson; elected Jan. 7, 1964, by Central Medical Society.

Gibson, John Yerger, Centreville. Born Meridian, Miss., Nov. 11, 1933; M.D., University of Mississippi School of Medicine, Jackson, 1960; interned Tampa General Hospital, Fla., one year; captain, U. S. Army; elected Dec. 1, 1963, by Amite-Wilkinson Counties Medical Society.

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"No, doctor, my rheumatism hasn't been acting up. I predict a fine weekend."

Griffith, J. M., Columbus. Born Relief, N. C., March 27, 1927; M.D., University of Tennessee College of Medicine, Memphis, 1959; interned Columbia Hospital of Richland County, S. C., one year; radiology residency, University of Tennessee College of Medicine, Memphis, three years; elected Dec. 10, 1963, by Northeast Mississippi Medical Society.

Lubritz, Ronald Raphael, Hattiesburg. Born New Orleans, La., Aug. 3, 1934; M.D., Louisiana State University School of Medicine, New Orleans, 1959; interned Touro Infirmary, New Orleans, La., one year; dermatology residency, Charity Hospital of Louisiana, New Orleans, three years; member International Society of Tropical Dermatology; elected Dec. 12, 1963, by South Mississippi Medical Society.

Owen, Julian Lee, Jr., Jackson. Born Greenville, Miss., Aug. 10, 1933; M.D., Vanderbilt University School of Medicine, Nashville, Tenn., 1958; interned Indiana University Hospitals, Indianapolis, one year; pediatric residency, University of Mississippi School of Medicine, Jackson, two years; lieutenant, U. S. Navy; elected Jan. 7, 1964, by Central Medical Society.

Turner, Cleveland, Jr., Tupelo. Born Belzoni, Miss., July 7, 1931; M.D., Tulane University School of Medicine, New Orleans, La., 1956; interned Charity Hospital of Louisiana, New Orleans, one year; general surgery fellowship, Ochsner Foundation Hospital, New Orleans, La., two years; general surgery residency, V. A. Hospital, Albuquerque, N. Mex., two years; captain, U. S. Air Force, two years; elected March 10, 1964, by Northeast Mississippi Medical Society.

Seminar Puts Emphasis On Vascular Diseases

Sponsored by the University of Mississippi School of Medicine and the Mississippi Heart Association, the 11th annual Cardiovascular Seminar, held April 1-3 at the University Medical Center, placed emphasis on vascular diseases by presenting a program which included five distinguished physician lecturers from noted clinics and hospitals.

Lecturers for the postgraduate course were Dr. C. H. Millikan of the Mayo Clinic, Rochester, Minn.; Dr. Frances Murphey, of the Seemes-Murphey Clinic in Memphis; Dr. H. Mason Sones of the Cleveland Clinic, Cleveland, Ohio; Dr. L. E. January of the State University of Iowa College of Medicine, Iowa City, and Dr. E. E. Gordon of Michael Reese Hospital and Medical Center, Chicago, Ill.

Among the topics covered at the three-day meeting were etiology of stroke, radiologic diagnosis of stroke, complications of acute myocardial infarction, profound hypothermia in the treatment of aneurysms, and rehabilitation of the stroke patient.

Full attendance carried category 1 postgraduate credit from the American Academy of General Practice.

State Morbidity Reported Through March 6

The Mississippi State Board of Health reports the following occurrence of morbidity for 1964 through the tenth week of the year, ending March 6, 1964. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	174
Tuberculosis, O. F.	39
Encephalitis, infectious	2
Dysentery	
Bacillary	1
Septicemia, Staph.	1
Meningococcus infection	
Meningococcemia	6
Meningitis, O. F.	3
Tularemia	1
Mononucleosis, infectious	18
Hepatitis, infectious	36
Helminthic infections	
Hookworm	158
Ascariasis	68
Strongyloides	11
Histoplasmosis	2
Streptococcus infections	
Scarlet fever	68
Strep throat	1094
Pertussis	19
Measles	675
Chickenpox	229
Mumps	276
Influenza	252
Gonorrhea	1029
Syphilis	
Early	55
Late	45

AUXILIARY

AMA, SMA Officers To Attend State Meet

Special guests for the 41st Annual Session of the Woman's Auxiliary to MSMA will be Mrs. William H. Evans of Youngstown, Ohio, president-elect, AMA Auxiliary, and Mrs. Paul Gray of Batesville, Ark., president of the Southern Medical Association Auxiliary.

Mrs. Evans and Mrs. Gray will address the Tuesday, May 12, sessions, and Mrs. Evans will install the new MSMA officers.

Mrs. Evans

An auxiliary member for 20 years, Mrs. Evans has served her county and state auxiliaries in many capacities. She was president of the Ohio State Auxiliary in 1956-57. On the national level, she served on the Resolutions Committee in 1957, as regional vice president, 1957-58, as director for two years, 1958-60, and as constitutional secretary for two years, 1961-63.

Mrs. Evans is a native of Youngstown, Ohio, and before her marriage in 1942 to Dr. Evans, an ophthalmologist and otolaryngologist, she was employed as an office manager, buyer, and jewelry designer. She also studied at Case School of Applied Science, University of California, and the American Gemological Institute. She has retained her interest in gemology, and in 1955 she designed the first pin for past presidents for the Ohio auxiliary and later another pin to be used by the past presidents of all county auxiliaries in her state.

Mrs. Gray

Mrs. Gray held numerous offices in the Southern Auxiliary before assuming the presidency. From 1957 to 1958 she was doctor's day chairman, from 1959 to 1960 she was recording secretary, and from 1960 to 1961 she was research and romance of medicine chairman. She served as first vice president during the 1961-62 term and president-elect during the 1962-63 term.

On the state level, she served as president of the Arkansas Auxiliary in 1959-60 and as area Rural Health Chairman from 1960-62. She served as county president in the term 1953-54.

A graduate of Lebanon Valley College in Annville, Pa., Mrs. Gray received the master of music degree from Westminster Choir College in Princeton, N. J. She studied voice with Dr. John Finley Williamson of Westminster, Jerome Robertson of Memphis State, and Leslie Chabay of Washington University and has done graduate work at Eastman School of Music in Rochester, N. Y.

She is a life member of the Friends of American Art, Butler Art Museum, and the Foundation of the New York Eye and Ear Infirmary, New York City.

She is listed in *Who's Who of American Women, Who's Who in the South and Southwest,* and *Who's Who in Arkansas.* She has published in the *National Poetry Anthology.*

Dr. and Mrs. Gray have one daughter, Mary Ann, 11.

Dr. Twente Speaks On MPAC to East Auxiliary

Members of the Woman's Auxiliary to East Mississippi Medical Society heard a talk by Dr. George E. Twente on the Mississippi Political Action Committee at their February meeting. Dr. Twente, chairman of MPAC, is shown with (from the left) Mrs. Raymond Lewis of Meridian, president-elect of East Auxiliary; Mrs. T. J. Safley of Jackson, president-elect, MSMA Auxiliary; Mrs. Mayo Flynt of Meridian, auxiliary member of MPAC, and Mrs. Mal S. Riddell of Winona, president, MSMA Auxiliary.

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MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Meeting, June 21-25, 1964, San Francisco, Calif. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn, Chicago 10, Ill.

American Academy of General Practice, April 11-16, 1964, Atlantic City, N. J. Mr. Mac F. Cahal, Volker Blvd. at Brookside, Kansas City 12, Mo.

American College of Surgeons, Clinical Congress, Oct. 5-9, 1964, Chicago. Samuel P. Harbison, Secretary, 40 East Erie, Chicago 11, Ill.

Southern Medical Association, Nov. 16-19, 1964, Memphis, Tenn. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 11-14, 1964, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday January, First Wednesday March, May, July, September, November. Charles D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday June and December. William E. Riecken, Jr., P. O. Box 831, Kosciusko, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday April and October, Oxford. Vernon B. Harrison, P. O. Box 36, University, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucius Olen Crosby Memorial Hospital, Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.

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Atlantic City To Host Annual GP Meet

Family doctors from all over the United States will gather in Atlantic City, N. J., April 13-16 for the 16th Annual Scientific Assembly of the American Academy of General Practice.

The theme for the 1964 Assembly will be "The Family in Medical Perspective," highlighted by 31 speakers and more than 110 Scientific exhibits.

The Academy's policy-making Congress of Delegates will convene April 11 at the Shelburne Hotel, and the scientific program gets underway on April 13 in Convention Hall.

Drs. William E. Lotterhoss of Jackson and John B. Howell, Jr., of Canton are MAGP delegates from Mississippi. Attendance at the Assembly is valued at 14 hours of postgraduate study.

Camp Established For Diabetic Children

Camp Seale Harris, a camp for diabetic children, boys and girls aged 8 through 14, has recently been established in Citronell, Ala., according to a release from Dr. Samuel Eichold, camp director.

"The camp," Dr. Eichold states, "will offer diabetes control, full recreational programs, and educational services. The 1964 season will be Aug. 9-22, and no child will be denied the privilege of attending due to inability to pay," the doctor reports.

The facility is named for Dr. Seale Harris, deceased Birmingham physician noted for his work in diabetes control and nutritional diseases.

More information may be obtained from Jeanette Overstreet, executive secretary of the camp, 1555 Springfield Avenue, Mobile, Ala.

Career Booklet Now Available

A new 36-page booklet designed to promote interest in hospital careers has been issued by Pfizer Laboratories and J. B. Roerig and Company, divisions of Chas. Pfizer & Co., Inc.

The booklet, prepared for high school students and college freshmen and sophomores, was published in cooperation with the Greater New York Hospital Association and checked for accuracy by the American Hospital Association and 16 other health organizations.

Volume V
Number 5
May 1964

JOURNAL of the Mississippi STATE MEDICAL ASSOCIATION

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THE JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, $5 per annum; $1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

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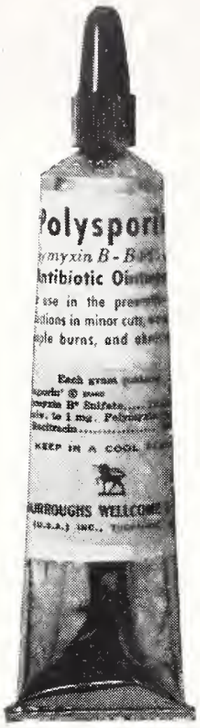
in treating topical infections, no need to sensitize the patient



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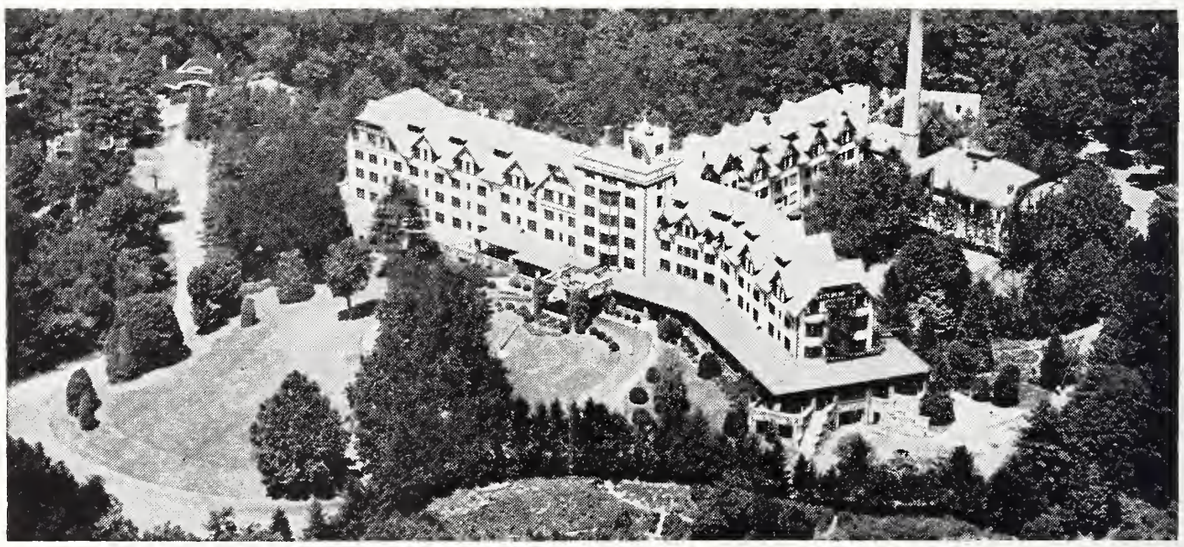

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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

May 1964

Dear Doctor:

Generic prescribing and substitution in Rx filling reared its ugly head again with introduction of H.R. 10677 by Rep. Leonard Farbstein (D., N.Y.). New proposal would require generic name to appear every time brand name does on label and literature. Pharmacists would be permitted to make substitutions with sanction of federal law.

> Rep. Farbstein ignores quality controls, varying strengths, and hard fact that there's no generic designation for a compound. Moreover, the "every time" appearance of generic designation is included in 1962 FDA amendments but may be knocked out by pending lawsuit.

Incidence of measles in Mississippi is up 500 per cent in last four months over total of last five years, according to release from State Board of Health. Epidemic covers 16 counties from north to south sections of state with over 37,000 cases reported since Jan. 1. SBH says in past five years there were only about 7,700 cases.

TV commentators notwithstanding, AMA did issue a no-punches-pulled statement over medical service crisis in Belgium. Dr. F. J. L. Blasingame said that "it is not for us to judge the wisdom of their (Belgian doctors) reaction but to appreciate that physicians - like all others - can be incited to revolt by politicians who seek to take over the practice of medicine."

AMA's 113th Annual Convention at San Francisco will be a real family affair with children's activities on the agenda. Each day during June 21-25, special treats for kids will include ice skating, lessons in making Chinese fortune cookies, bay cruises, zoo and aquarium visits, a folk music hootenanny, and entertainment by Ernie Ford. Sponsor of unique daily features is Woman's Auxiliary.

Psychoquackery has become a major danger to health, according to new studies by American Psychiatric Association. Weird assortment of cults prevail, APA says, because of public confusion over what qualifies an individual to treat the human mind. Estimates are that 25,000 psychoquacks flourish in 30 states with inadequate medical practice acts.

Sincerely,

Rowland B. Kennedy

Rowland B. Kennedy
Executive Secretary

Relative Income Importance Shifts For Medical Schools

Chicago - Funds sources of high importance to medical schools in 1941 are lower on the financial totem pole today, concludes the Association of American Medical Colleges in new studies. Reporting on 16 public and 26 private schools, AAMC said that tuition dropped to third for tax-supported institutions and rose to first for the private schools. Endowment income in public segment went from fourth to ninth and from first to third for private units. Shifts may be affected by new and substantial research grants.

SBH Reports On Public Health Nurses

Jackson - Mississippi now has 273 public health nurses - approximately one-third of all public health personnel in the state - with each of the 82 counties staffed. New studies disclosed that 19 counties are served by one, 30 counties by two, and 33 counties by three or more. Hinds tops list with 16, Harrison is next with 12, and Delta counties have two to nine. Total is short of recommended ratio of one nurse per 5,000 population.

Contact Lens Hassle Flares In New England

Boston - Dr. William Stone, Jr., director of Mass. Eye and Ear Infirmary, says he has traced blindness, near-blindness, and 400 cases of eye damage to improper use of contact lenses. Blast leveled at optometrists by Dr. Stone suggested that chemical impurities in plastic from which lenses are made may be dangerous and that only physicians were competent to prescribe them. Optometrists retaliated with suit, and hassle is underway. Recent case decided in Meridian involved optometrists and optician but did not directly involve ophthalmologists.

Rhode Island Physicians Nix Fags On Tobacco-Health Report

Providence - A survey of Rhode Island physicians by the American Public Health Association turned up fact that 67 per cent are now non-smokers. Returns showed that 31.2 per cent had never smoked and that 35.8 per cent had voluntarily quit, mostly over scientific evidence of danger to health. Findings reveal that remaining 33 per cent who now smoke will decline as more stop.

Population Explosion Continues But Mortality Rises

New York - Metropolitan Life Insurance Co. actuaries say that U.S. and Canadian populations rose to new heights in 1963, hitting 210 million. U.S. total increased 2.7 million to 190.8 million, but U.S. death rate appears to be going up. Mortality for all age groups was reported at 7.5 per 1,000, up from 7.2 in 1962. Most significant mortality increase came from cardiovascular-renal conditions.

ain is almost invariably a presenting symptom in cases of skeletal muscle spasm

In some instances, the pain subsides on relaxation of the muscles in spasm. In others, relaxant therapy alone fails to give adequate relief, and supplementary analgesia (and possibly sedation) are indispensable, as in cases of:

provocative pain, when muscle spasm is triggered by some painful underlying musculoskeletal defect.

residual pain, when relaxation of severe spasticity leaves a degree of myalgia that tends to reinvoke spasm.

severe pain, when the degree of pain is such as to cause persistence of symptoms in spite of relaxant therapy.

emotionally aggravated pain, when anxiety or agitation creates tension that thwarts the efficacy of both relaxant and analgesic medication.

In such cases, ROBAXISAL and ROBAXISAL-PH have proven highly effective in assuring decisive and comprehensive relief. The ROBAXISAL formula—of ROBAXIN (methocarbamol), the potent muscle relaxant, together with aspirin, the time-tested and proved analgesic—produces higher plasma salicylate levels than equivalent doses of aspirin alone, and serves effectively to control both spasm and pain. ROBAXISAL-PH's combination of ROBAXIN (methocarbamol) with the analgesic-sedative ingredients of the PHENAPHEN formula—including phenobarbital—helps additionally to ease apprehension.

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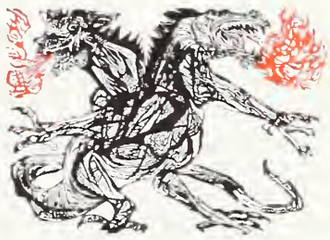
Hyoscyamine sulfate 0.016 mg.
Phenobarbital (⅛ gr.)....8.1 mg.
(Warning: May be habit forming)



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ROBAXISAL and ROBAXISAL-PH are indicated in strains and sprains, painful disorders of the back, "whiplash" injury, myositis, pain and spasm associated with arthritis, torticollis, and headache associated with muscular tension.

Side effects such as lightheadedness, slight drowsiness, dizziness and nausea may occur rarely in patients with intolerance to drugs, but they usually disappear on reduction of dosage.

Contraindicated for patients hypersensitive to any component of the formulations. There are no specific contraindications to methocarbamol, and untoward reactions are not to be expected.

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MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Meeting, June 21-25, 1964, San Francisco, Calif. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn, Chicago 10, Ill.

American College of Surgeons, Clinical Congress, Oct. 5-9, 1964, Chicago. Samuel P. Harbison, Secretary, 40 East Erie, Chicago 11, Ill.

Southern Medical Association, Nov. 16-19, 1964, Memphis, Tenn. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 11-14, 1964, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday January, First Wednesday March, May, July, September, November. Charles D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday June and December. William E. Riecken, Jr., P. O. Box 831, Kosciusko, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday April and October, Oxford. Vernon B. Harrison, P. O. Box 36, University, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucius Olen Crosby Memorial Hospital, Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
May, 1964, Vol. V, No. 5

ORIGINAL PAPERS

The Management of Staphylococcal Septicemia and Pneumonia

JOHN H. SEABURY, M.D.
New Orleans, Louisiana

Despite the discovery of numerous antibiotics the mortality of staphyloccal septicemia remains at about 45 per cent and the mortality of primary staphylococcal pneumonia at about 12 per cent. The author considers the management of these two diseases and reports a case of staphylococcal septicemia and embolic pneumonia to illustrate his discussion.

THE MORTALITY AND MORBIDITY of severe staphylococcal infections have not decreased as much since 1950 as the possession of numerous antibiotics would lead one to expect. The mortality of staphylococcal septicemia is fairly uniform at 45 per cent except for those staphylococcal septicemias acquired within a hospital where the mortality is about 65 per cent. The mortality of primary staphylococcal pneumonia has remained fairly constant at about 12 per cent.

The incidence of penicillinase-producing staphylococci among the nonhospitalized population has steadily increased during the last several years. In addition, resistance to the tetracyclines is a common finding in staphylococcal infections that have not been treated prior to the performance of antibiotic sensitivity studies. This state of affairs may be due in part to the common use of these antibiotics for treatment of minor staphylococcal infections, but one must also take into account those individuals who leave the hospital while harboring resistant organisms on the skin and within the nose and throat. These people may serve as disseminators of resistant staphylococci among their close contacts. One can no longer rely upon the older penicillins, tetracyclines, erythromycin, or their combinations to be effective in the treatment of *Staphylococcus aureus* infections acquired outside of the hospital.

The major therapeutic problems posed by the *Staph. aureus* are: (1) resistance to antibiotics, (2) bacterial persistence, (3) early, and often wide-spread, metastasis during bacteremia, and (4) superinfection by other organisms.

The administration of three or more antibiotics simultaneously to patients with serious staphylococcal infections is a rather common practice, based on two premises: (1) that the emergence of resistant organisms will be prevented or greatly delayed and (2) that the initial sensitivity of the staphylococcus is not known at the time treatment is started.

From the Department of Medicine, Louisiana State University School of Medicine.
Read before the Section on Medicine, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

Initial antibiotic resistance is a real problem which can be met by starting treatment with two antibiotics, of which at least one is known to be generally effective against penicillin-resistant staphylococci. At the present time, I initiate treatment of most patients with intravenous penicillin G and methicillin. Daily dosage is large—20 million units of penicillin G and at least 8 gm. of methicillin. Except for its irritating action on veins, vancomycin is an excellent antibiotic which will be effective in most cases when used alone. Although Kirby[1] believes that 2 gm. of vancomycin given intravenously daily is adequate for serious staphylococcal infections, I look upon this dosage as a minimum, preferring 4 to 6 gm. daily during early treatment.

If methicillin or vancomycin is administered intravenously in adequate doses, there is no reason to give more than two antibiotics. The antibiotic regimen can be altered after the initial antibiotic sensitivities are reported if the clinical course of the patient is not favorable. Furthermore, the concurrent use of multiple antibiotics predisposes to superinfection with gram-negative bacteria and fungi.

The development of resistance to the antibiotic or antibiotics being used during the course of treatment is not a serious problem. It occurs infrequently with bactericidal antibiotics, and at a time when the clinical course of the patient has improved to the point that it is quite apparent that something is amiss. Whenever the clinical course of a patient with severe staphylococcal infection alters unfavorably, one must suspect and look for: (1) superinfection, (2) bacteremia from a feeding focus, or (3) antibiotic resistance.

Frequent cultures of blood, urine, sputum and other available exudates will usually clarify the situation. Antibiotic sensitivity studies should be requested on all isolates. However, the appearance of new organisms in the urine or sputum is not an indication for altering treatment if the clinical course of the patient is satisfactory.

Bacteremia from a feeding focus may create a serious threat to life both acutely and recurrently and should always be sought. If obvious clinical metastasis does not take place during the initial period of bacteremia, it may do so during episodic bacteremia from a feeding focus. As a rule, the organisms leaking into the blood stream are as sensitive to antibiotics as the original isolate. If the patient survives the changes produced by bacteremia, worsening is temporary. Blood for culture should be greatly diluted with broth, approximately one cc. per 50 or 75 cc. of broth, and the cultures should be held for seven to ten days inasmuch as growth may be considerably delayed. The physician must request the laboratory to process cultures in this manner. If a feeding focus can be localized and is accessible to surgical drainage, this should be attempted unless the general condition of the patient makes surgery inadvisable.

BACTERIAL PERSISTENCE

The problem of bacterial persistence is important in the management of severe stapylococcal infections as well as being of concern in the spread of these organisms to others. The fact that *Staph. aureus* will persist in closed and open lesions despite the clinical recovery of the patient is one problem that has not been solved. Patients may serve as disseminators of virulent staphylococci. The persistence of the organism may also bring about relapse after apparent cure. For the latter reason, I treat serious staphylococcal infections for long periods of time. The phenomenon of microbial persistence is complex and not entirely understood. Most of the information indicates that persistence is an adaptive phenomenon on the part of the staphylococcus to its environment. In addition, these persisting organisms divide infrequently or not at all which may make them unaffected by antibiotics. There is also evidence that certain environments reduce the effectiveness of an antibiotic as, for example, the greatly decreased effect of streptomycin on staphylococci in a semi-anaerobic environment. This is one of the reasons why I have employed high doses of antibiotics in order to increase the concentrations of drug in difficult environments.

In my own experience, superinfection has been an increasing problem. One reason for this has been the greater number of patients surviving long enough to develop superinfection. It also seems apparent that certain antibiotics or antibiotic combinations favor the development of superinfection by members of the residual bacterial population or opportunistic organisms. Gram-negative rod superinfections, especially with *Pseudomonas,* seems to be particularly prevalent when methicillin is used. The Louisiana State University Infectious Disease Service at the Charity Hospital in New Orleans has isolated and studied 21 cases of candidemia occurring during the course of antibiotic treatment for bacterial disease. Candidemia may be transient, disappearing after modification or cessation of the antibiotic regimen, or it may be persistent and re-

quire immediate treatment if the patient is to survive.

Although the mortality of primary staphylococcal pneumonia is much lower than that associated with staphylococcal septicemia, the principles of management are the same. The most important single measure in management is early recognition and the same treatment with antibiotics as recommended for staphylococcal septicemia. In most instances, staphylococcal pneumonia can be recognized by examination of either Gram's-stained or Wright's-stained smears of sputum. Infants and small children usually do not produce sputum, but although less reliable, throat smears are often a good guide. If numerous extracellular or intracellular staphylococci are seen, a presumptive diagnosis of staphylococcal pneumonia should be made and treatment instituted before cultures and sensitivity studies are reported. Oral antibiotics should not be used for the early treatment.

Because the staphylococcus produces extensive necrosis as well as suppuration, there are certain therapeutic problems which arise frequently in the course of staphylococcal pneumonia. The most important problems are: (1) the production of pneumatoceles, (2) empyema, (3) tension pneumothorax and pyopneumothorax, and (4) slow resolution of abscesses.

Pneumatoceles are particularly common in children, but also occur in adults. They should be left alone unless their size becomes such as to be life-threatening, in which case suction drainage should be instituted. Occasionally, the distinction between large pneumatoceles and loculated pneumothorax is difficult. Lateral decubitus x-rays are helpful in this situation.

IMPORTANT PROBLEMS

The most important problems are empyema and tension pneumothorax or a combination of the two. Multiple abscesses are frequently present and peripheral. Pleural perforation is common, resulting in a localized or diffuse collection of pus which may or may not have an air level. Loculation is common in adults but unusual in children. Pyopneumothoraces rarely displace the mediastinum or produce acute ventilatory insufficiency. However, pneumothorax may develop rapidly and become a true tension pneumothorax. This is a surgical emergency, and the equipment necessary for treating tension pneumothorax should be present in the room of any patient with an extensive staphylococcal pneumonia.

Approximately one-third of all patients with staphylococcal pneumonia will develop some form of pneumothorax. A pyopneumothorax should be aspirated as completely and as early as possible. Closed suction drainage for either empyema or pyopneumothorax should be the initial measure in infants or small children. Intelligent needle aspiration is frequently successful in adults, but if there are large areas of pneumothorax in conjunction with empyema, or if the empyema is large and recurrent, closed tube suction is the treatment of choice.

I believe that antibiotics should be given for several weeks after the patient becomes afebrile and the disease essentially cleared by x-ray. It is at this time that one can use orally-administered antibiotics in accordance with the sensitivity studies. Oxacillin is the antibiotic of choice for oral administration in penicillinase-producing staphylococcal infections. One should remember that absorption will often be irregular, and a dosage of 4 to 6 gm. per day is desirable. For reasons of economy, triacetyloleandomycin, 2 gm. per day, may be preferred. Patients receiving oral antibiotics should be closely observed for relapse.

Staphylococcal empyemas are particularly likely to develop superinfection with *Pseudomonas*. This is a serious problem, and it is an additional reason for early drainage of empyema. Pus should be examined frequently by Gram's stain as well as by culture. If pseudomonas appears, treatment with polymyxin or Coly-Mycin should be instituted promptly. From years of experience with polymyxin, I cannot understand the fear with which many physicians regard this antibiotic. Tissue tolerance for Coly-Mycin is greater than for polymyxin, but otherwise both antibiotics are essentially the same and have lesser toxicity than some antibiotics which are used rather freely.

Superinfection by fungi probably occurs more frequently than is recognized. Species of *Candida* are the most important and common offenders. Although the alimentary tract may be a natural portal of entry, our studies[2] and those of Louria[3] indicate that broad-spectrum antibiotics, corticosteroids, venous cut-downs and venous catheters, and prolonged use of a single intravenous set at a single site are all very important in the pathogenesis of candidal superinfection. When candiduria or thrush appears during the course of treatment of severe staphylococcal infection, one should be particularly alert for candidal superinfection. Candidemia can be overlooked unless the blood

is greatly diluted with broth and cultures held for two weeks. Fortunately, iatrogenic candidemia frequently disappears soon after removal of indwelling venous catheters or the use of a new intravenous set each day. However, if candidemia is accompanied by deterioration of the clinical course of the patient, amphotericin B should be given intravenously promptly. Although our experience is limited, it is apparent that this type of candidemia frequently responds to very short courses of amphotericin B.

I have selected a patient with staphylococcal septicemia and embolic pneumonia to illustrate most of the problems which I have discussed. Figure 1 is a graphic presentation of her illness.

The patient, a 12-year-old female, fell while in a bath tub. There was no external evidence of injury, but within the next 24 hours she complained of pain in her low back, anorexia, and vomiting. A physician administered an injection of antibiotics. The primary complaints continued, and fever, pharyngalgia and diarrhea appeared. She was admitted to a hospital with a presumptive diagnosis of enteritis and pharyngitis.

Shortly after admission she became hypotensive, comatose, cyanotic, and multiple hemorrhagic vesicles appeared over the entire body surface. Her involuntary stools were observed to be grossly bloody. Her neck became rigid, and lumbar puncture revealed a purulent meningitis which was culturally positive for *Staph. aureus*. Peritoneal aspiration revealed a bloody and purulent fluid. A

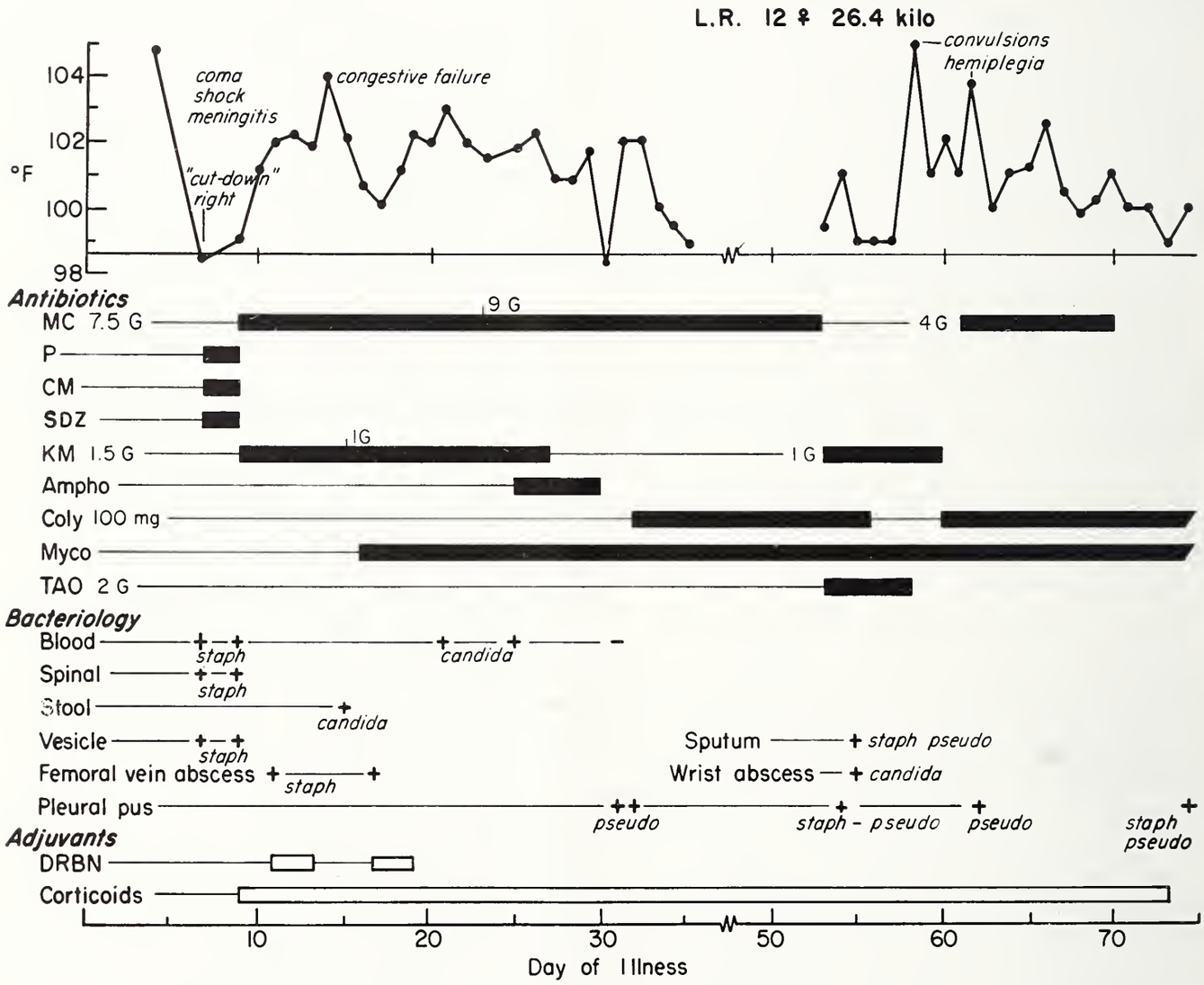

Figure 1. Graphic summary of the first 73 days of illness. The maximum daily temperatures are plotted in relation to significant events. Abbreviations: MC = methicillin; P = pencillin; CM = chloramphenicol; SDZ = sulfadiazine; KM = kanamycin; Ampho = amphotericin B; Coly = Coly-Mycin; Myco = mycostatin; TAO = triacetyloleandomycin; DRBN = crystalline pancreatic desoxyribonuclease. The dosage of antibiotics is indicated in grams or milligrams on a daily basis.

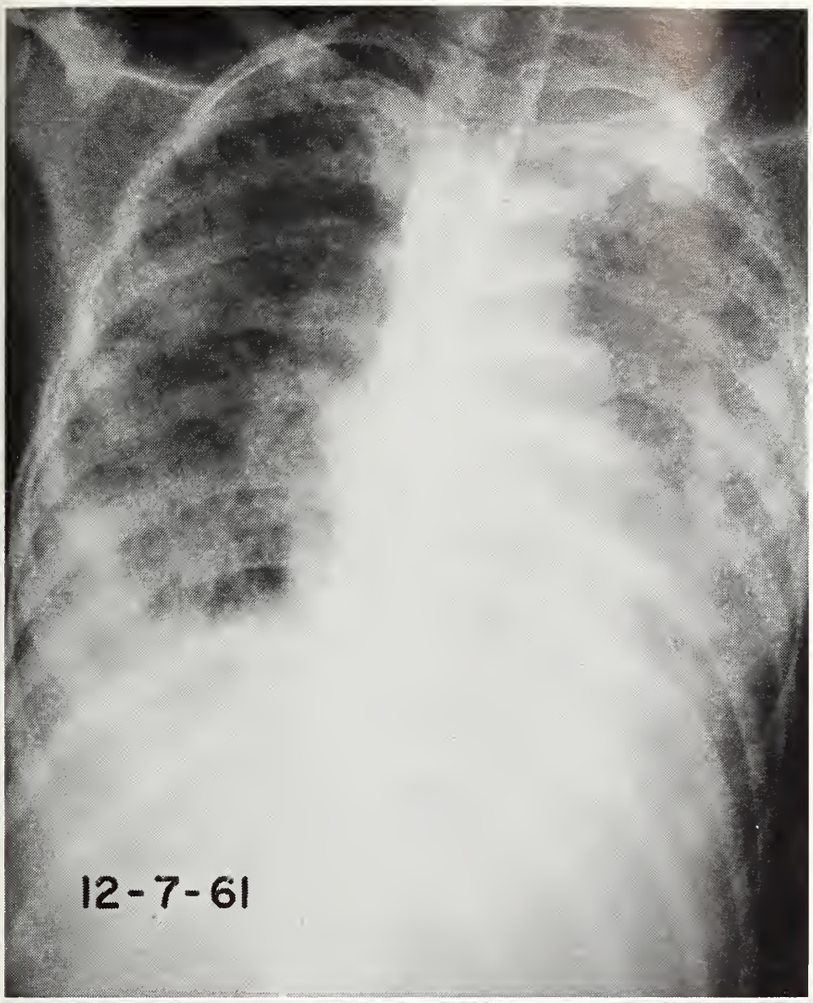

Figure 2. Chest x-ray at the time of admission to Charity Hospital. The embolic pneumonitis is evident throughout all lobes, but is concentrated at the right and left lung bases and the left apex. A pericardial friction rub was present at this time.

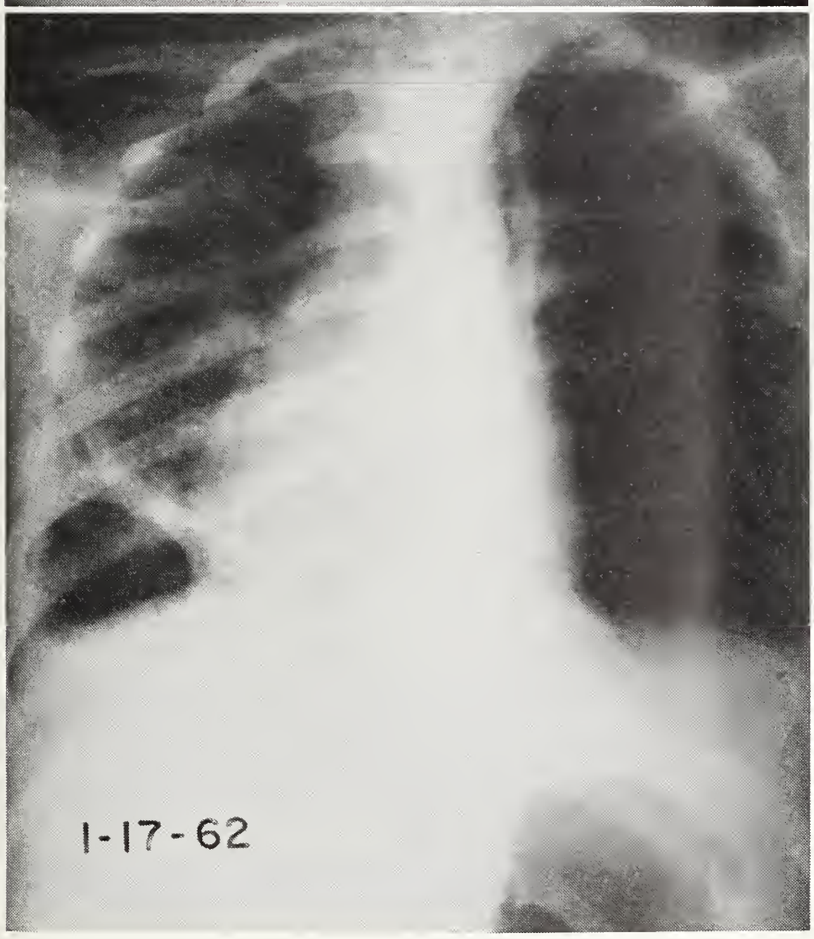

Figure 3. Portable chest x-ray at the time of tension pneumothorax. There was complete collapse of the left lung with shift of the heart and mediastinum to the right. A loculated pneumothorax is evident at the base of the right lung. There has been complete clearing of the pneumonia in the right lung.

cut-down was placed at the right ankle for the initiation of intravenous therapy with penicillin, chloramphenicol, and sulfadiazine. The patient was then transferred to the Infectious Disease Unit of the New Orleans Charity Hospital.

At the time of admission, in addition to shock, coma, meningitis, and peritonitis, it was established that she had diffuse stapyhlococcal pneumonia, pericarditis, and pleuritis. The liver was greatly enlarged and suspected of containing an abscess. Methicillin intravenously and kanamycin intramuscularly were administered in very large doses relative to her body weight. Supportive measures such as hydrocortisone sodium succinate and oxygen were necessary in our judgment. Figure 2 shows the extent of the staphylococcal pneumonia at the time of admission.

Seven days after admission, acute congestive failure with increasing pericarditis required rapid digitalization and diuresis. Because of the tenacious, purulent sputum, and the extent of the suspected visceral involvement, a solution of crystalline pancreatic desoxyribonuclease was given intravenously on several days.

After initial improvement, she became more febrile and a new area of pneumonitis was detected by x-ray. Candidemia was recognized and treated with small doses of amphotericin B for seven days only. There was no recurrence of candidemia.

A very large abscess occurred in the femoral vein and surrounding tissues at the saphenous hiatus and above the inguinal ligament. Needle aspiration was sufficient to bring about healing during the course of antibiotic treatment. We presumed that this abscess came from the cut-down at the ankle. Staphylococcal empyema was present bilaterally, and although recurrent, was controlled by thoracentesis. A pneumatocele developed adjacent to the left empyema pocket and suction drainage of the empyema was indicated. However, the patient had developed an extensive methicillin rash over her entire body despite corticoids. The skin of the thorax was thin and desquamating which prompted the unwise decision to avoid catheter drainage. Tension pneumothorax occurred on the 31st hospital day (Figure 3), and intubation with closed suction was immediately instituted. The empyema had become mixed, *Pseudomonas* being the second superinfecting organism in this patient. The pseudomonas infection was adequately controlled by Coly-Mycin. Two days after the tension pneumothorax appeared, the methicillin rash became so severe that it was decided to discontinue the antibiotic. Triacetyloleandomycin was substituted, and kanamycin, which had been discontinued after 18 days, was re-started. After several days of kanamycin, Coly-Mycin was discontinued in order to avoid renal toxicity. Two days later, the patient complained of severe headache and on the following day had a series of grand mal convulsions requiring tracheostomy. A complete left hemiplegia developed, and methicillin and Coly-Mycin were promptly re-started. Her subsequent course was uneventful.

An abscess on one wrist, at the site of an intravenous infusion during the early course of her illness, was found to contain a pure culture of *Candida*. Simple needle aspiration of the abscess was followed by complete healing.

Antibiotic therapy was given for one week less than five months. At the time of discharge, small loculated pneumothoraces were present at both bases as residuals of the empyema pockets. These subsequently absorbed without impairment of diaphragmatic motion.

In summary, this patient had a staphylococcal septicemia with suppurative phlebitis and multiple abscesses. There were many metastatic areas of involvement, including meningitis, enteritis, peritonitis, pericarditis, and almost certainly a brain abscess. Her staphylococcal pneumonia was accompanied by the development of pneumatoceles, one of which ruptured and produced a tension pneumothorax. Empyema appeared early, and superinfection with *Pseudomonas* complicated the empyema and pneumonia. Superinfection by *Candida* was reflected in a sudden worsening of her clinical course but was easily controlled. Closed tube suction could have avoided the tension pneumothorax. Serious relapse followed too early withdrawal of the most effective antibiotics. All of these problems were overcome, primarily because they were anticipated and met promptly. She became clinically well, but there were staphylococci present in her sputum for many months. ★★★

1542 Tulane Ave.

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The Post-Thrombophlebitic Syndrome

FREDERICK H. BOWEN, M.D.
Jacksonville, Florida

THROMBOPHLEBITIS of the deep veins of the leg following injury, a surgical operation, parturition, or certain febrile illnesses is a complication with far reaching implications. There is a possibility that the patient may have a fatal pulmonary embolus from the clots in the veins of the leg. In the months and years which follow the thrombosis, the veins usually recanalize. In about 10 per cent of the cases, the deep veins of the legs do not recanalize following a thrombophlebitis. According to Piulachs,[1] chronic venous insufficiency arises from three causes:

1. Obstruction in a deep vein, resulting either from a thrombophlebitis or less frequently from a neoplastic invasion and external venous compression.
2. Valvular incompetency of deep veins following a thrombophlebitis which has been recanalized.
3. Primary valvular incompetency which is hereditary. In these cases there is no previous history of thrombophlebitis.

We are chiefly concerned with the valvular incompetency of deep veins and communicating veins which follows a thrombophlebitis as it is the most frequent cause of chronic venous insufficiency. After the thrombus in the vein becomes canalized, the valves are usually functionally incompetent because of scarring and adherence to the vein walls. However, in order for the venous pressure to be transmitted to the skin and subcutaneous tissue of the patient, it is necessary for the valves of the communicating veins to be incompetent also. The incompetence of the deep and communicating veins results in an increased ambulatory venous pressure in the lower extremities, and this results in edema, pigmentation, and eventually ulceration of the leg. The legs and feet which are affected by this condition are subject to fungus infection, and the breaks in the skin which are produced by the fungus infection provide a portal of entry for streptococci. Each episode of streptococcal infection produces more scar tissue and adds to the insufficiency of the return of venous blood from the extremity and also adds to the scar tissue in the leg which tends to ulcerate. It should be noted that almost all of the patients who have a venous ulcer of the leg have had a past thrombophlebitis. Primary varicose veins do not usually eventuate in ulceration of the leg.

When these patients come to the office, a vein questionnaire is usually filled out by the office nurse. This vein questionnaire is printed here. Although it will be useful as an outline in approaching the problems of venous surgery, the individual doctor will make additions to this outline.

The post-thrombophlebitic syndrome is one of the great unsolved problems of vascular surgery. The author reviews the pathologic physiology involved in this syndrome and outlines his treatment of choice.

VARICOSE VEIN QUESTIONNAIRE

Name: Age: Date:

History:

Has any member of your family had varicose veins, leg ulcers, milk leg or swelling of either leg following an injury, operation or illness?

How long have you had varicose veins?

What operations have you had?

Did your legs swell following any operation while you were still in bed?

Have you ever had a broken leg? List all serious injuries.

Read before the Section on Surgery, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

Did your legs swell following broken leg?

Have you ever had typhoid fever, typhus fever, malaria, rheumatic fever, scarlet fever, or any other high fever? List all serious illnesses.

Did your legs swell while you were still in bed following fever, or after you got out of bed?

How many children do you have?

Did you develop milk leg, thrombophlebitis or swelling of either leg following delivery?

Has any doctor every told you that you have thrombophlebitis or milk leg?

Have you ever had sores or ulcers on your legs?

Have you ever received treatment for your legs? Shots—Operations—Ace bandages?

How do your legs bother you most? Pain—Swelling —Appearance?

Do you smoke, and if so, how much?

Can patient walk around the block with Ace bandages applied from the base of the toes upward to just below the knees?

Right Leg:
Is fungus infection present?

Left Leg:
Is fungus infection present?

Skin Temperature of the Plantar Surface of the Great Toe:
Right Left

Dorsalis Pedis Pulsation:
Right Left

Posterior Tibial Pulsation:
Right Left

Are the communicating veins competent?

Leg Measurements:

3″ below patella	5″ below patella	8″ below patella	3″ above patella	5″ above patella

Date:
Right leg
Left leg

This vein questionnaire aids in determining whether one is dealing with a case of primary varicose veins or the post-thrombophlebitic syndrome. After the first three questions are checked, one can ignore the questions answered "no," and concentrate on the questions answered "yes," except for the question concerning the number of children.

On examination one can see whether the leg is swollen, whether it is pigmented, whether an ulcer is present, and whether gross varicosities are present. Careful examination by means of elevating the legs and placing a tourniquet at various levels of the legs will aid in determining whether incompetent communicating veins are present, and if so, at what level they are found. It should be noted that the communicating veins usually communicate with the great saphenous vein by means of a small plexus and are located about 2.0 to 3.0 cm. lateral or medial to the main saphenous trunk.[2] Stripping the saphenous trunk does not remove the communicating veins. The communicating veins feel somewhat soft in the tissues and a fascial defect is felt underlying a dilated vein.

These veins should be carefully sought out and marked by means of an appropriate dye. For many years we have used the following formula:

Pyrogallic acid—5 gm.
Acetone—50 cc.
Solution of Ferric Chloride (N.F.)—40 cc.
Ethyl Alcohol, to make—100 cc.

Dissolve the pyrogallic acid in alcohol, add acetone and ferric chloride solution and alcohol to make 100 cc. After this solution is applied to a nongreasy skin, it will remain for many days and will usually not be rubbed off by vigorous preparation of the skin for operation. More recently we have been using a Vaporite Brush Pen for marking veins. This may be obtained from Time Saving Specialties, Minneapolis, Minn. The veins can be marked by scratching with a needle, but occasionally one is embarrassed by scratching too deeply and causing a superficial varicosity to bleed. This minor complication is easily controlled, however, by applying a 4 x 4 inch gauze sponge to the area and fixing this in place with roller gauze bandage and an Ace bandage.

Unfortunately, in many of the patients who most need their communicating veins removed, the communicating veins are obscured by being imbedded in areas of brawny induration, edema, and ulceration. These stasis changes are usually distal to the perforators, however. At times, the control of edema by sharp elevation of the legs so that the malleoli are 2½ to 3 feet higher than the heart will permit one to find perforating veins which previously were obscured by edema. Measuring for perforating veins, use of the bandaging technique, and use of multiple tourniquets are usually not of too much help in localizing the perforating veins. At times a "perforator" which has been missed at the time of surgery becomes embarrassingly evident in the early or late postoperative period. The terms communicating veins and

perforating veins are used synonymously in this article.

We often put patients with severe fungus infection of the toenails on Griseofulvin 500 mg., two times a day, for about two weeks before the operation. I continue this for several months after the operation. At the time of the vein operation, we usually remove the toenails which are grossly infected.

A sterile preparation is done of the entire leg. The leg is then wrapped in a sterile dressing, and at the time of the operation is prepared with a tinted tincture of Zephiran or Merthiolate. It is advisable to have 500 cc. of blood available for most of these cases. An oblique incision, about 5 inches long, is made in the fold of the groin, and all of the superficial veins in this area are dissected out and removed as extensively as possible. An internal vein stripper is passed down the great saphenous vein to the region just below the knee where an incision is usually made and the marked veins in this area are removed. If a double saphenous vein is present in the thigh, it is sought out and removed. The posterior venous arch in the posterior part of the calf is removed, as well as the great saphenous trunk and an anterior vein over the shin, if this is present. The most important part of the dissection is to seek out the perforating veins which have been marked in the lower medial leg and to remove these down to the deep fascia and ligate them at this point. The patient is then turned over, and the small saphenous vein is removed from the lateral malleolus upward to the popliteal space or to the entrance of the small saphenous into the great saphenous or into the femoral vein. It is advisable to use gentle sharp dissection in the lower leg, especially if an incision is made in any of the pigmented, indurated, edematous tissues in this area.

We usually close the skin with interrupted sutures of 32 or 36 stainless steel wire, and we are careful not to tie these sutures tightly. The wounds are covered with vaseline gauze and sheet wadding is applied from the base of the toes to the groin. Elastic bandages are applied over this and fixed in place with adhesive tape.

If the toenails are to be removed, this is done as the last part of the procedure after the other operative wounds have been covered with a dressing. The toenails are removed, and we usually dress the nail beds with a piece of rubber drain material which can be obtained from an ordinary Penrose drain and which does not stick to the denuded nail bed.

In the postoperative period, the patient gets out of bed the day after the operation and walks for five minutes every hour. This probably reduces the incidence of pulmonary emboli.

The patient remains in the hospital from three to seven days, and the wounds are usually not dressed for one week. At the end of a week, half of the sutures are removed and elastic bandages are applied from the base of the toes upward to just below the knee. At the end of two weeks, the remainder of the sutures are removed and the patient is instructed to sit in hot water for 30 minutes, two times a day, with the hot water coming up over the affected extremities. Approximately one month after the operation, the elastic bandage is gradually discontinued. The bandage is removed by the patient one hour before he goes to bed, and the time of removal is increased by one hour each night so that the patient gradually is wearing no external support at all. He is carefully observed during this period of time, and if any edema occurs, the elastic bandage is reapplied and if necessary, the patient is given a diuretic such as hydrochlorothiazide 50 mg., to take each morning in order to reduce the edema.

The doctor who treats these cases, and the patients, should realize that the edema is a premonitory symptom of an ulcer and that edema should be eliminated as rapidly as possible. The patients who have had extensive damage to the tissues of the leg with severe induration, pigmentation and ulceration are usually fitted with an elastic stocking. We send the patient to be measured, and the stocking is made especially for him. If a patient has had an ulcer on his leg, the leg is supported for six months after the ulcer heals, and then an attempt is made to discontinue the use of an elastic stocking or elastic bandages. If the patient gets cording from the use of an elastic bandage, it is helpful to apply a recurrent type of elastic bandage which will prevent this type of cording.

It is advisable during this period of time to continue the treatment of fungus infection of the toenails and feet and to eliminate it in so far as possible. We have not been able to cure the fungus infection of the nails and feet in the past, but have usually been able to keep it under control. With the advent of Griseofulvin, it is likely that more of these patients with fungus infection will be cured.

It is advisable to control obesity in these patients, and to direct other methods toward their general health. Needless to say, these patients

should have a complete history and complete physical examination.

PROBLEM OF RECURRENCES

Inevitably, some of the patients with the post-thrombophlebitic syndrome will get a recurrence of their ulceration. This can often be healed by various simple methods if it is seen when the ulceration is small and superficial. In general, we use two different methods. The first consists in applying a piece of adhesive tape over the ulcer and putting a 4 x 4 inch gauze pad over this area. A Gelocast boot is applied from the base of the toes upward to the anterior tibial tubercle. The patient is urged to walk for a portion of each day. The other method which we use consists of applying Terramycin powder to the ulcer and a gauze pad over this. An elastic bandage is then applied from the base of the toes to the anterior tibial tubercle. These methods are both efficacious in healing recurrent ulcerations. Occasionally, when a patient has a recurrence, it will be apparent that a communicating vein has been missed at the first operation, and it is advisable to ligate this vein as soon as the ulceration can be healed.

SKIN GRAFTING

In patients who have a large ulcer over one inch in diameter which is surrounded by an indurated area, it is often helpful to excise this area and do a skin graft, either as a separate procedure or at the same time with the vein surgery. In order to do this, a culture and sensitivity test should be made of the bacteria which are in the ulcer. The patient should be placed on specific antibiotics for two days before, and five days after, the operation. Under a pneumatic tourniquet, the ulcer and indurated skin are excised down to and including the fascia which overlies the muscle and tendons. A pressure dressing with the inner gauze sponges soaked in normal salt solution is applied, the pneumatic tourniquet is deflated, and the leg is elevated for five or more minutes at a very acute angle so that the malleoli are three feet higher than the heart. The dressing is then removed and bleeding points are clamped and tied with fine catgut. A split thickness graft, which is usually obtained by means of a Padgett's dermatome, is then applied over this area. Perforations are made in the grafted skin. A plaster cast is applied to immobilize the leg.

SUBFASCIAL LIGATION

In certain cases of the post-thrombophlebitic syndrome, it is advisable to make a long incision from the knee to the ankle at a point 2.0 cm. posterior to the medial border of the tibia. This incision is carried down to the muscle and the dissection carried in a subfascial plane around the leg. The perforating veins are identified and ligated. The great saphenous vein is stripped down into the foot by means of an internal vein stripper. The small saphenous vein can be seen shining through the fascia in the posterior part of the incision and is similarly removed. A drain should be placed in a stab wound in the middle of the posterior calf, and after the fascia and skin have been closed, the leg should be immobilized in a cast.

In 3 out of 13 cases which we treated by this method, there was some sloughing of skin. Two of the cases were healed by skin grafting, and the third was allowed to heal by scar formation. All three cases have remained healed. This method is helpful in treating cases of the post-thrombophlebitic syndrome which have resisted other methods of treatment. It is desirable to explain the possibility of a slough of skin to patients before doing this operation. In some patients I have done a lumbar sympathectomy about a month before the subfascial ligation was done. In patients I have treated in this manner, we have had no sloughing of skin. Of 11 patients we treated by subfascial ligation, whom we were able to follow, six had no recurrences and five had recurrences which were usually readily healed by bandaging.

NONSURGICAL METHODS OF CARE

It is desirable to train these patients to assume a new way of life which will permit drainage of venous blood from the legs. It is very desirable for the patient to lie down and put his legs up in the air for 30 minutes, every three hours during the day. Housewives and others can do this and will derive much benefit from this procedure. Some patients are able to put their legs up in the air and eat their noonday meal. Other patients take advantage of coffee breaks to elevate their legs. It is desirable for the foot of the bed to be elevated about a foot to facilitate drainage of venous blood from the legs during the night.

If a patient has to stand in one position, such as a woman does who is ironing, she should "fidget" and flex her knees during this period of time

in order to aid in milking blood back to the body from the legs. Control of fungus infection is important. Cleanliness of the feet and legs is emphasized. I tell my patients that they should keep their feet cleaner than they do their faces. In any event, we ask them to wash their feet and legs two times a day and to dry carefully between the toes when they do this. They are also advised to put a drying powder between their toes. The patients should maintain their weight in the normal range and not allow themselves to become obese.

LONG TIME FOLLOW-UP

These patients should not be discharged, but should be followed for the rest of their lives. The patient should understand that *leg swelling is a premonitory sign of an ulcer,* and that the swelling must be corrected in order to prevent the formation of an ulcer.

The patient should also be told that if a burning pain occurs beneath the site of a previous ulcer, this usually means that an ulcer is going to return. Prompt bandaging and other treatment at this stage will often prevent the ulcer from returning. The patient should understand the harmful effects of fungus infection of the feet in this condition, and be urged to cooperate in its eradication. He should understand that minimal trauma to his ankle, which is a trivial injury in most people, may result in the occurrence of a chronic large and painful ulcer. He should report to his physician at once for treatment after sustaining such an injury.

We have these patients come back at intervals and see us for the rest of their lives and do not discharge them. At the time when they return, it is usually advisable to do something to them in a helpful way, as they are more apt to continue to return if the doctor does something when they come, than if he merely looks at their legs. The patients are often unable to realize the value of repeated inspections of the legs by the doctor, but if they see the doctor do something, they are more apt to think that the office visit is of value to them. One can often do something to their toenails in the way of trimming these down, and advising some sort of application to use in control of the fungus.

At times, it is advisable to inject recurrent varicosities, especially if these are incompetent. I usually limit the patient to one course of injections as I suspect repeated injections damage the deep veins and their valves. If a patient returns who is wearing an elastic stocking, it is advisable to check the stocking and see that it has retained its elasticity. If the stocking is worn out, the patient should obviously be advised to get another one. This is one of the areas where the patient often needs advice and an urging from the doctor to get another stocking. If the stocking is worn out and the patient cannot afford to get another one, its efficacy may be improved by having the patient wear an elastic bandage over the stocking until such time as he is able to afford a new stocking.

Frequent checks of the patient give an opportunity to encourage him to persist in the reduction of his weight.

SUMMARY

In summary, we have reviewed the pathologic physiology involved in the post-thrombophlebitic syndrome. We have outlined a means of treatment which has been helpful in our hands in taking care of these patients. The post-thrombophlebitic syndrome is one of the great unsolved problems of vascular surgery, but the physician who persists in treating these patients by means of the knowledge which is presently available, will be able to help many of these unfortunate people continue as active members of society. ★★★

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INSULTED INSECT

Buzzing around the supermarket, the housefly alighted near the insecticides and read the labels with horror. As he flew away, he shook his head sadly. "Alas!" he muttered, "there's so much hatred in the world today."

Care of the Premature Infant In the Small Hospital

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CARE OF THE premature baby is one of the most rewarding aspects of the practice of obstetrics. This paper will discuss the management of the premature infant in a small hospital.

MATERNAL CARE

Care of the premature begins in the prenatal care of all maternity patients. A careful history is taken with emphasis on the history of premature labors in past pregnancies. Frequently that is the best guide to avoiding prematurity or to prolonging pregnancy so that the offspring will be strong enough to survive. A complete physical and a complete blood and urine study is made at the first opportunity, and appropriate treatment is given for any abnormality. Prescriptions, instructions in diet, rest and activity, and other habits are discussed with the expectant mother.

Several articles relating heavy smoking to premature labor have appeared recently. One of the latest was published in *Obstetrics and Gynecology* in April 1963 by Jay R. Zabriskie, M.D.[1] This study of 2,000 births, 957 smokers, and 1,043 nonsmokers showed that the average birth weight of babies born to smokers was 8 oz. less than the weight of babies born to nonsmokers. The prematurity rate was two and one-half times more in smokers, and the abortion ratio was slightly higher in smokers. For these reasons excessive smoking in all pregnancies seems unwise and especially in cases of habitual prematurity and repeated abortions.

Early recognition of multiple births is also valuable because a sizable percentage of premature babies comes from this group. In my series, 27 per cent of the prematures were from twin pregnancies. Regular prenatal visits with attention given to the height of the uterine fundus will often alert the physician to need of x-ray to confirm the presence of twins or more. If multiple births are expected or any signs of premature labor arise, prompt, all-out treatment should be started and frequently will avoid a premature labor episode. Bed rest is important, and frequently a few days in the hospital will give excellent results. Psychologically, this impresses the patient and family as to the urgency of the situation. Diethylstilbesterol in dosages of 15 to 30 mg. daily has been effective in stopping contractions and should be continued throughout the pregnancy in many cases. If there is any bleeding, Hesper-C and/or vitamin K has been helpful. In occasional cases there is much tenderness and evidence of infection in the abdomen and pelvis. These cases will respond to antibiotics, especially penicillin-streptomycin, and the other medications will be more effective.

Although premature infants comprise only 5 to 10 per cent of all live births, about two thirds of all neonatal deaths occur in premature infants. The author discusses the care of these babies in a small hospital. He considers maternal care and management of the infant and reports a series of 48 prematures.

When premature labor has advanced to an inevitable delivery, consideration of the postnatal condition of the baby should be paramount in the treatment. Many of these cases come into the hospital so far advanced that delivery is imminent. There is no need for heavy sedation or much anesthesia. Our sedation of choice is phenergan 50 mg. and meperidine 50 mg. For anesthesia we

Read before the Section on General Practice, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

use trichloroethylene and a pudendal block. An adequate episiotomy will be an aid to delivery and take unnecessary strain off the infant. This routine has not given respiratory or other reflex depression so disastrous in the premature baby.

MANAGEMENT OF THE PREMATURE

The baby immediately is held feet high and mucous aspiration with rubber suction bulb done. The cord is stripped to provide the infant with all blood possible. Then ligation of cord is done. Repeatedly the nose and throat are cleared with the soft tipped suction bulb. If respiration is not spontaneous, gentle artificial respiration is started. By use of the suction bulb to force air into one nostril while closing the opposite nostril and closing the mouth by holding the chin up, a positive pressure in the nasopharynx will give a good expansion of the lungs. This may be repeated rhythmically as is needed. Air forced into the stomach can easily be expelled by gentle massage of the upper abdomen. Flexion of the abdomen onto the thorax aids in expelling air and fluid from the lungs and when done repeatedly with slight compression of the lung cage gives a moderate air exchange.

Visual aspiration of the trachea and bronchial tree by use of the laryngoscope has not been used. Caffeine sodio-benzoate by hypodermic in dosage of 1¾ grains will stimulate respiration and heart action. Adrenalin I.M. is used also to stimulate heart activity. As soon as respirations are established, the infant is put in an incubator with oxygen and in a Trendelenburg position. This is the Higgins technique which he reports as successful in 17,000 apneic newborns. Careful, constant attention must be given at this time, for a small plug of mucous or regurgitant fluid must be removed at once. Shifting the infant from side to side allows better lung inflation and gravitation of mucus.

Nursing care is the paramount need from this stage to discharge of infant. If nurses are uninterested or unskilled in infant care, it can be fatal. Credit for our success must be given to the nursing staff because of the constant attention given these prematures. All sterile precautions for the first days are taken so that once the routines are established they are carried out easily.

After 18 to 24 hours, if the infant's condition merits, glucose 5 per cent by dropper is started. In 48 to 72 hours the average infant can take some form of milk formula. We usually use some of the commercially prepared milk formulas and have seen little difference among them as far as the infants are concerned. Individual infants seem to do better on one formula than another or have more or less bowel movements, but I have not developed a stock formula. The dilute formula, if retained, is strengthened as rapidly as the baby will tolerate it.

Most prematures under 4 lb. weight are best fed by gastric gavage. On the third or fourth day a small plastic tube size 8 F. or smaller is passed from the nose to the stomach. Aspiration of the tube to recover stomach content is imperative to ascertain that the tube is properly placed. In spite of all care some tubes have to be removed because of nose or throat irritation or blockage. These usually can be replaced successfully in a couple of days. With a properly functioning gavage tube the infant can be fed properly, easily, efficiently and to the exact cubic centimeter desired. Excess gas and mucus can be aspirated from the stomach before feedings. Also by leaving the tube elevated and unstoppered, gas and fluid is regurgitated and relieves stomach pressures. This is of particular value in the infant that is prone to spit up easily. The feedings by tube are started as glucose 5 per cent in distilled water 8 to 10 cc. every 2 hours. After several retained feedings, a formula of three parts water to one of milk is started in the same volume. As these are tolerated, the glucose is discontinued and the formula is strengthened. Gradually the desired formula in the needed volume on a two hour basis is achieved.

Some infants will not retain feedings so hypodermoclysis 5 per cent glucose in dextrose in water must be given and will sustain the baby for several days. Addition of five drops of ethyl alcohol to an ounce of formula will stimulate and strengthen the babies. Particularly is this useful in the bottle-fed child that is not taking a sufficient quantity of formula.

The usual nursing notes and records have proved inefficient and uninformative for following these cases. For that reason a check sheet nursing record has been devised which is simple, easy to follow and fill out. The main entries for these check sheets are incubator temperature, infant rectal temperature, feedings, stools, and voidings. Medication notes are kept below the graphic check.

We have encountered few infections in these children. Especially has the staph problem not fallen our lot. Occasionally we have a pyodermia of staph origin, but they have responded promptly to pHisoHex baths and ammoniated mercury 5 per cent ointment. We have not seen systemic staph infections. Occasional enteritis or bronchitis has responded to the conventional antibiotics. By

having a small nursery population, we have not often had a cross infection problem.

DISCHARGE PROCEDURE

Few infants should leave the hospital until 5 lb. or better is reached. Occasionally we have had 4 lb. plus infants that were strong enough to breast feed so we have discharged them with their mothers. After several bad experiences with discharged prematures, we take special precautions in explaining to the parents the dangers of infection to these patients. Most have been able to construct or borrow some type of incubator that can be used to isolate the infant from the other members of the family as well as from thoughtless friends. The home problems are simplified by the incubator.

All infants at about 4½ lb. are started on a three hour schedule so that their care at home is made easier. Also hemoglobin and hematocrit determinations are necessary before discharge. If hemoglobin is low, the switch to a milk formula with iron has effectively raised the count in the infants in our series.

RESULTS

My series of prematures dates from 1950 and includes babies whose birth weight was less than five pounds and, of the survivals, all weighed five pounds or better on discharge or were being breast fed or bottle fed easily and freely. Since few are strong enough to be breast fed, there were only two such cases in the series. Seven were born at home.

The total series includes 48 infants. Of these, two died in the first 24 hours. Four died in three to thirty days and 42 survived to be discharged. There were five sets of twins where both were premature and three sets where only one twin was treated for prematurity. This is a total of eight sets of twins in the series and 13 infants total. There were 16 white females and 11 white males for a total of 27 white infants. There were 14 Negro females and 7 Negro males for a total of 21 Negro babies.

The hospitalization of the surviving infants averaged:

2 -3 lb. (4 infants)	59	days
3 -4 lb. (17 infants)	40.7	days
4 -4½ lb. (12 infants)	27.5	days
4½-5 lb. (9 infants)	16	days

The two infants that expired in the first 24 hours died of cardio-respiratory complications from incomplete development or from hyaline membrane complications. One 4 lb. 2 oz. infant had hemorrhage of the newborn and expired rapidly from nose and throat bleeding on the third day. One 3 lb. 2 oz. twin had a severe complete cleft lip and palate. She survived for 33 days but gained only 12 oz. The gavage tube was repeatedly replaced, but she retained little of the formula.

One white male birth weight of 2 lb. 4 oz. was delivered at 6½ months pregnancy because of a premature placental separation. He survived for 23 days and was seemingly gaining strength. He probably died of inspiration of mucus and/or formula. Sudden death also occurred in a premature male who had gained from 3 lb. to 3 lb. 6 oz. in 30 days. The surviving 42 fully compensated the staff for the many hours' work and tedious care necessary to make these infants' survival possible. ★★★

Walthall Hospital

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HOLMES THE HUMORIST

Before Oliver Wendell Holmes was a writer, he practiced medicine, and taught anatomy at Harvard and Dartmouth. As a practitioner he was not successful, for people were a bit doubtful about the flippant youth, who posted the following sign above his office door: "Small fevers gratefully received."

Tuberculosis Skin Testing In Jones County

SHELBY W. MITCHELL, M.D.
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Approximately 805 new cases of tuberculosis are diagnosed in Mississippi each year. In the control of this disease, skin testing in the schools is being used more extensively. The author discusses the skin testing program in Jones County.

TUBERCULOSIS AS AN ENEMY and killer of man antedates recorded history. Despite the incredibly rapid fall in the tuberculosis death rate during the past few decades, the disease is still a significant public health problem. It is the leading cause of death for the age group 15 through 34 years in the United States. Changes in the epidemiologic pattern of tuberculosis during the past half century and particularly during the past two decades have served to increase the importance of a new outlook on the control program for the disease.

Mississippi still has its share of active cases of tuberculosis, with an average of approximately 805 new cases being diagnosed each year. Control measures consisting of case finding by x-ray and positive sputum, chemotherapy, thoracic surgery, and rest thus far have contributed remarkably to the decline in both mortality and morbidity rates, but it seems that at the present we are on a plateau in the control program. More and better tools are needed for the eventual eradication of the disease. In many sections of the country mass tuberculin testing, particularly in the school age group, has been added to the control program.

In several counties of Mississippi some type of skin testing program is being used in the schools. In the school year 1959-60 a skin testing program was begun in the schools of Jones County with four main objectives in view: (1) case finding, (2) detection and prophylactic treatment of young reactors, (3) pinpointing of high incident areas, and (4) education.

During the first two years of the program (1959-60 and 1960-61) the Volmer patch method was used for mass screening. Positive and questionable reactors to the patch were followed with the Mantoux (intradermal) method intermediate strength PPD for confirmation. As the patch method was found to have a wide range of error, it was discontinued. During the past two years the Heaf (multiple puncture) method has been used. Reactors to this method are also followed by the Mantoux method for confirmation and induration size. This method has been found to be better accepted by the child, is easier to administer, less expensive, and more reliable than the patch.

At the beginning of the program an intensive education program was presented to the public. Newspaper, radio, and television publicity was used to sell the program. Civic clubs, P.T.A. groups and even some church organizations were presented with discussions of the testing plan. The local medical society, the civic clubs, P.T.A.'s, and the local TB society endorsed the program. The program has been well accepted by both parents and children.

During the first year of the program all children in grades one to six in all schools of Jones County and the City of Laurel were offered the test. Approximately 90 per cent of these children received the test. During subsequent years all children in grades one, three and five were offered the test. Consequently each child has an opportunity to take the test every other year.

Read before the Section on Preventive Medicine, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

Personnel responsible for administering the test consist of public health nurses and civic club or P.T.A. members. P.T.A. members in each respective school were generally used to assist the nurses to create more enthusiasm among the parents and teachers of each school being tested.

PROCEDURE

Parental consent for testing each child was obtained by the principal of each school before beginning the test. Cards were made on each child by P.T.A. workers prior to testing date. The testing team was organized and oriented in technique of administering the test immediately prior to testing date. This team consists of (1) a card collector, (2) one to cleanse the arm with acetone, (3) one to apply Tuberculin with tooth pick, and (4) one to operate Heaf gun. Each student on the morning of testing date was given his card by the class room teacher. The student then passed by the testing station in single file. As the child passed by the station the arm was cleansed with acetone, the Tuberculin was applied with a sterile tooth pick, then the Tuberculin was pressed into the layers of the skin with the stern needle, and finally the card collected. A sterile stern needle is used for each person being tested. As many as 850 students have been tested with this procedure in a regular school morning.

Tests are read three to five days after testing date usually by the public health nurse assigned to each respective school. Reactors and questionable reactors were followed by the Mantoux method with intermediate strength PPD. (All definite Heaf Positives have been found to be Mantoux Positive.)

FOLLOW-UP

All reactors were followed by x-ray. Household contacts to reactors were followed with skin tests for children and chest x-rays for adults. Contacts who were reactors to the test were also x-rayed. The sources of infection for all reactors except four children in one family and two more children in two different families have been found.

Skin testing has been used extensively for food-handlers to obtain health permits, barbers and beauticians to obtain licenses, and on numerous other adults. During the past two school years the children of the 7th, 9th and 11th grades of the Laurel City Schools have been added to the testing program. (This added service in the Laurel City Schools was made possible by the voluntary help of an inactive RN who is a member of the local TB association.)

CONCLUSIONS

During the four years' testing period approximately 12,000 children in age group 6-14 years were tested. Of these 12,000 tested, 151 or 1.25 per cent were found to be positive reactors. Out of 1,588 adults tested, 547 or 34 per cent were found to be positive.

TUBERCULIN SKIN TESTING JONES COUNTY
1959-1963

Age Group	*No. Tested*	*No. Pos.*	*Per Cent Pos.*
6-14	12,000	151	1.25
21 & over	1,588	547	34.00

Through the skin testing program eight new cases were found during the four year period. Five of these cases were found directly through the skin testing and three indirectly in adult contact to reactors.

Forty-four children have been placed on prophylactic INH. These children are either strongly positive reactors (12MM induration or more) or are skin test positive household contacts to active cases. Prophylactic treatment is continued for a 12 month period.

Tuberculosis is still a big public health problem. Skin testing in schools is being used more and more each year as a tool in controlling the disease. Skin testing has been used extensively in the school age children in Jones County during the past four years. Found positive to the test were 1.25 per cent of age group 6-14 years and 34 per cent of age group 21 and over. Eight new cases have been found through the testing program. Forty-four children who have been infected with acid fast bacilli have been treated prophylactically with INH. Skin testing is a relatively inexpensive tool to use in the TB control program.

Cost of administering the test is approximately 3c for each child including tuberculin, cotton, acetone, and applicators. Initial cost of Heaf gun and needles is $50 for one gun and 100 needles. The average time per public health nurse per school year to get the skin testing done is approximately 22 hours. This does not include time for follow-up of reactors and contacts.

The skin testing program in Jones County has been of great value in case finding. It has been of greater value in finding children who have been infected and who may benefit by prophylactic treatment. It has also been of great value in pinpointing highly infected areas and in education.

★★★

501 Hill St.

Clinicopathological Conference LII

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

Dr. Myra D. Tyler: "This CPC apparently involves three systems: upper respiratory tract, lower respiratory tract, and urinary tract. First, I shall emphasize some of the important points in the protocol and simultaneously make some complaints about information not provided. This is a 56-year-old white woman who was apparently well until one month prior to admission to this hospital. The time sequence indicates that her acute illness was approximately eight weeks in duration—going from good health to death. This suggests a rather rapidly progressive disease process.

FIRST SYMPTOMS

"Her first symptoms were sniffles, some fever, and cough associated with ear ache and difficulty with hearing. She consulted a physician who noted a bilateral ear infection. This infection was of such severity that a rather marked hearing loss and impaired equilibrium developed. Although never clearly stated, neither of these symptoms apparently improved throughout the subsequent eight week course. I feel this lack of improvement is important in terms of the basic diagnosis. Home therapy included antibiotics, local measures, and sedatives. The protocol does not indicate whether steroids were given either locally or systemically, but neither the ear trouble nor the cough was relieved. Chest x-ray was obtained, and she was referred to the University Medical Center because of a lesion noted in the right upper lobe, apparently a new finding.

"On admission she did not appear critically ill. Hearing was grossly impaired, necessitating 'shouting' for communication, and a purulent discharge was noted from both external auditory canals. Infection of the tympanic membranes was present despite four weeks of therapy for relief of this symptom. A perforation in one tympanic membrane was described. No comment was made regarding tenderness to palpation over the sinuses or mastoids. The only other abnormal finding noted was harsh breath sounds over the right upper lobe area. The remainder of the examination apparently was not remarkable. A specific statement that the skin, extremities, and upper abdomen were within normal limits would be helpful. No past history is given; therefore, I assume that neither chronic cough nor chronic sinus difficulty had been present.

CPC LII concerns a 56-year-old white woman with a previous history of good health who died eight weeks following the onset of symptoms. Pertinent symptoms included sniffles, some fever, and cough associated with ear ache and difficulty with hearing. Discussers are Drs. Myra D. Tyler, Carl G. Evers, Robert D. Sloan, and Herbert G. Langford.

LABORATORY DATA

"Admission laboratory data showed a hematocrit of 35 and a WBC of 10,000. Urinalysis revealed slight proteinuria with some red cells, white cells, and moderate bacteria. The BUN was 12; febrile agglutinins and other such studies were negative. A slightly high fasting blood sugar was noted, and the glucose tolerance test was slightly abnormal. Serum globulin was 3.6 gm. per cent, a little high for this hospital. Regarding bacteriology, sputum culture grew coagulase positive *Staphylococcus aureus* on several occasions; no evidence of either acid fast bacteria or fungi was found on multiple examinations. Several possibly important items are missing, including ear cul-

tures and urine cultures. Of particular importance is the question of culture from the ear. An ear infection severe enough to cause permanent loss of hearing and impaired equilibrium should warrant a culture for fungi as well as bacterial pathogens. Dr. Sloan will discuss the x-rays, but no mastoid x-rays are mentioned. The EKG was interpreted as within normal limits.

"The hospital course I found rather interesting, particularly in regard to the pathology reports on the bronchial biopsies. Bronchoscopy was done three days after admission. The mucosa of the right main bronchus was red, edematous, and abnormal. Multiple biopsies were taken. I am not quite sure what they showed—perhaps they were all ground up or something happened to them. By the time they got to pathology, the pathologists couldn't tell what tissue had been biopsied or what the cells were on the section except that they were abnormal. Were they eosinophils?"

Dr. Carl G. Evers: "No, it was just nonspecific chronic inflammation."

Dr. Tyler: "Without granulomas?"

Dr. Evers: "Right."

HOSPITAL COURSE

Dr. Tyler: "For diagnostic purposes bronchoscopy was repeated three days later with essentially the same result except this time the abnormal findings in the tracheobronchial tree extended to the left. In essence, six days after admission, the patient was still without a definite diagnosis. However, by that time sputum cultures had returned showing *Staph. aureus,* and methicillin and oxacillin therapy was initiated. Despite this, chest x-rays showed progression of the process in the right lung. Dr. Robert D. Sloan told me it extended into the left lung. Sometime in the four week hospital course massive hemoptysis developed. I am not sure just when this began, but my guess is about the third week. The protocol notes a drop in hematocrit, and this may be related to the massive hemoptysis. Again, I am not certain about time sequence because eight transfusions were given during the last week, and by that time blood loss from another source was evident.

"The third component of the basic process was heralded by severe left flank pain associated with paralytic ileus and frank hematuria. A thought that must have occurred to most of you is that no diagnostic studies were done at this point according to the protocol. Does anyone know if this is true? Were any x-rays, special studies for stone such as cystoscopy, performed? Or had this patient already been considered terminal and therefore kept comfortable? The latter course is my assumption, but I am not sure I am correct. Can anyone contribute?"

Physician: "Dr. Tyler, I saw this patient, but I haven't read the protocol and I don't recall the exact circumstances."

Dr. Tyler: "According to the protocol, she developed acute left flank pain five days prior to death. An abdominal x-ray was obtained, and urinalysis revealed frank hematuria. I am assuming this represents the sudden onset of real hematuria as opposed to the 5-8 red cells noted on admission."

Dr. Evers: "No further diagnostic studies such as IVP were done."

ACUTE EPISODE

Dr. Tyler: "This acute episode was followed by a sudden decrease in urinary output; but remember that eight blood transfusions were given during the last week. Moist rales appeared throughout her right lung which could indicate extension of the basic process or beginning cardiac failure. BUN became elevated in a progressive fashion. BUN was 12 on admission; I am assuming that it must have been approximately 200 at the time of her death. What it was just prior to the urinary catastrophe is not available.

"Her condition deteriorated, and she expired in acute respiratory insufficiency of some etiology on the 30th day of her hospitalization. From assumed good health to death within a two month period of time is a fairly rapid process by any criteria. Therefore, processes that are fatal relatively rapidly must be considered primarily in the differential diagnosis. Before committing myself, I would have liked to have had a little more definite information in three areas. First, on the biopsies, were either granulomas or areas of arteritis present? By report neither of these lesions was found, but the problem of adequate biopsy has to be considered. Second, under physical findings, were skin lesions, hepatomegaly, or splenomegaly present sometime in the four week hospital course and either not described or observed? Third, in the x-ray findings, clear-cut evidence for or against a destructive process in the sinus or mastoid areas would be helpful.

"Of the various diagnostic possibilities to be considered, in my opinion the best is the syndrome known as Wegener's granulomatosis. This is described as a clinical 'triad'[1] comprising a necrotizing granulomatous process involving first

the upper respiratory tract, second the lower respiratory tract, and third the urinary tract. Focal areas of vasculitis involving both the arteries and the veins may be found anywhere in the body at autopsy; therefore, additional signs and symptoms can vary widely.

"The characteristic clinical course is exactly as described in this CPC. The best article I could find describing clinical problems summarizes the findings in seven cases.[2] Four of the seven had involvement of the upper respiratory tract with a necrotizing granulomatous process. All seven had involvement of the lower respiratory tract including the bronchial mucosa as well as the lungs. It seems clear that this patient's bronchial mucosa was involved in some sort of pathological process. At least it was abnormal to direct observation, and I assume it was abnormal on histopathologic examination. All of these seven cases had splenic lesions or enlargement (a new fact to me) hence the query as to possible splenic enlargement terminally in the patient today. Of the six cases in the series where autopsy had been done, five showed extensive involvement of the kidneys. One case in particular was appropriate in regard to the discussion today.

"This concerned a patient with a known diagnosis of Wegener's granuloma of several months' duration. He was readmitted with acute severe left flank pain and frank hematuria. BUN on admission was 9, and nine days later on the day of death BUN was 200. Autopsy revealed bilaterial acute necrotizing renal arteritis and bilateral focal necrotizing glomerulonephritis. This clinical course relieved my concern regarding the problem of unilateral flank pain described in the protocol today. At present, therefore, I feel that the best possible diagnosis to explain this patient's clinical course would be Wegener's granulomatosis with probable necrotic lesions in the middle ear bilaterally, extensive involvement of the bronchial mucosa (although it is not possible to state whether the bronchial involvement is necrotic and granulomatous, or 'chronic inflammatory') and bilateral renal arteritis possibly associated with a necrotizing glomerulonephritis. Other organs are probably involved, but the information given does not indicate where the lesions might be. Dr. Sloan will discuss the x-rays."

X-RAY DATA

Dr. Robert D. Sloan: "We have a series of chest films on the patient. The first, taken on April 20, shows a rather homogeneous opacification in the upper portion of the right lung. In addition there are some small nodular areas of increased density in the midportion of the right lung as well as a few areas on the left side. Otherwise the chest appears essentially normal for the patient's age. The next film was taken one week later, demonstrating extension of the opacification down into the base of the right upper lobe. A study two weeks later shows further progression predominately involving the right lung with perhaps some element of diminution in the volume of this lung. The final film was done on the day of death. It was a portable study and reveals further involvement of the left lung. Radiographically therefore, we can say that this seems to be a rather rapidly progressing pulmonary lesion. One would not think of a neoplastic process. Some overwhelming infectious agent could do this such as *Staphylococcus,* but one would expect that the organism responsible would be readily obtained. Wegener's granulomatosis is not an x-ray diagnosis, and this possibility could not be excluded."

Dr. Tyler: "I am so taken with the diagnosis of Wegener's granulomatosis, it is difficult to consider other possibilities. However, first, the question of disseminated staph infection. You will note the blood cultures were negative. One of the distressing aspects of not having urine or ear cultures is not knowing if generalized staph is a good possibility. Staph does cause a necrotizing process and can be associated with areas of destruction not only in the lungs but in the kidneys and the mastoids and I presume any place it happens to locate, and this patient was mildly diabetic. It produces a fairly virulent necrotizing process. On the other hand, this patient did receive reasonably effective antibiotic therapy for *Staphylococcus,* and as near as I can tell there was not even transitory improvement which I feel would be unusual."

Physician: "There was not any improvement."

DIFFERENTIAL DIAGNOSIS

Dr. Tyler: "In considering tuberculosis in a patient this sick, one might anticipate that the skin tests would be negative. However, we should have at least seen the bacteria on smear. Destruction of the kidneys can occur in tuberculosis, but such a rapidly destructive process is most improbable. Necrotic lesions in the upper respiratory tract do occur in the nasal area and in the ear with tuber-

culosis, but again the organism was not seen. Under these circumstances, it is usually readily obtainable. I think these facts eliminate tuberculosis as a probability.

"We then have to consider a group of collagen diseases which can be rapidly progressive with a fatal outcome in a short time span. Systemic lupus erythematosis might be a strong contender, but the lack of skin rash, peripheral neurologic involvement, and the probable involvement of the upper respiratory tract and the bronchial mucosa would be quite unusual for SLE. Considering periarteritis nodosa, no nodules are reported, and the extensive mucosal involvement is not characteristic of this entity. Histiodytosis X, I will mention only in passing. I do not know how to make or eliminate this diagnosis, but the patient's age is not appropriate. The clinical course described here, beginning with involvement of the upper respiratory tract, progressing to the lower respiratory tract, and ending with terminal renal failure so closely fulfills the characteristic clinical "triad" of Wegener's granulomatosis that despite the lack of granuloma seen on biopsy specimen, I think this will remain my initial and final diagnosis. This entity is loosely grouped with the collagen diseases. The etiology is unknown, but infectious, toxic, and hypersensitive mechanisms have all been considered by various authors."

POSTMORTEM

Dr. Evers: "At postmortem examination it was apparent that the disease was widespread, with extensive lesions involving many organ systems. There was a serosanguinous peritoneal effusion and bilateral serosanguinous pleural effusions. There were multiple petechiae and a few ecchymoses involving the mesentery and serosal surfaces of the bowel. There were fairly extensive fibrinous pleural adhesions around the right upper and middle lobes. Both lungs contained parenchymal lesions, although the right lung was much more extensively involved. The right lung weighed 650 gm., and the right upper lobe was almost completely consolidated (Figure 1). It was firm and yellow-grey and had a gritty texture on cut surface, with multiple small foci of soft yellowish necrotic material. Scattered throughout the right middle and lower lobes and also in the left lung

Figure 1.

apex were similar smaller lesions. These were all fairly discrete. In addition, there were multiple miliary nodules.

"Microscopically, these lesions represented discrete to confluent necrotizing granulomas (Figure 2). There were irregular foci of necrosis, made up of hyaline necrotic debris, with a polymorphonuclear leukocytic infiltrate. Surrounding these necrotic foci was a zone of fairly extensive fibrosis, with a dense cellular infiltrate made up of PMN's, lymphocytes, macrophages, and giant cells of both Langhans' and foreign body types. Many of the lesions clearly involved bronchi and bronchioles; in the areas of consolidation, the bronchi were all involved. In sections of lung away from the frank gross lesions, there were

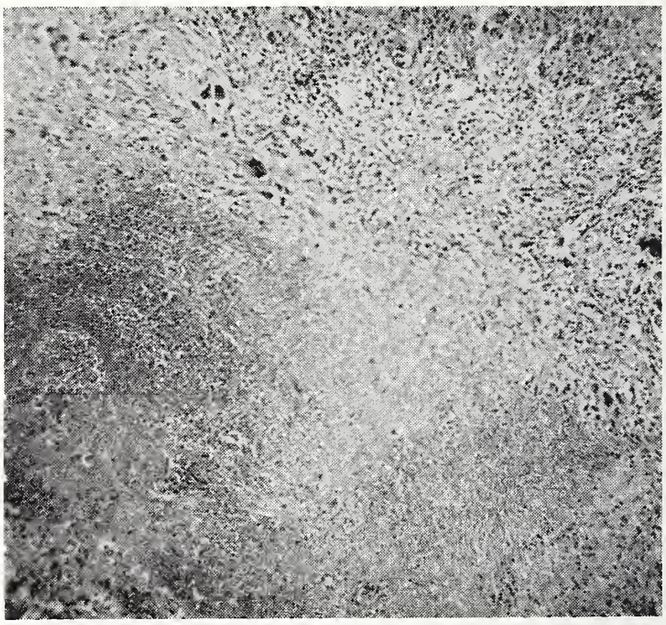

Figure 2.

what appeared to be early lesions involving both bronchi and arteries. Many bronchi showed an extensive lymphocytic infiltrate; others also contained PMN's and macrophages. All gradations, up to the necrotizing granulomas, were present. Likewise, one could trace various stages in development of the vascular lesions.

"In some sections, only the vessels were involved. Many were clearly pulmonary arteries; others were probably veins. In some, a portion of the circumference of a vessel contained an inflammatory infiltrate with endothelial proliferation. In others, this infiltrate was extensive, with edema of the vessel wall, and endothelial proliferation and attached thrombotic material. In others the entire circumference of the vessel was involved, with giant cells present. These changes progressed to foci of necrosis and the typical necrotizing granulomas involving vessels. There was extensive fibrosis and bronchiolar proliferation between the necrotizing granulomas. In areas containing no lesions, the lung was essentially normal; there was no pneumonia. Multiple special stains revealed no bacteria, acid-fast bacilli, or fungi.

"Sections from the trachea showed a severe inflammatory process with giant cells and necrosis, with destruction of the mucosa, and severe involvement of submucosal mucous glands. The bronchial biopsies were reviewed, and showed a fairly extensive inflammatory infiltrate and edema, with destruction of the mucosa. However, the hallmarks of the lesion, the giant cells and necrosis, were not present. Therefore, the changes were not specific.

"Unfortunately, the autopsy permit excluded examination of the brain; therefore, no sections of middle ear or sinuses are available.

"The heart weighed 300 gm. There were numerous small irregular, yellow to white foci scattered throughout the myocardium of both ventricles, with a few in the atria. The major extramural coronary arteries were unremarkable. However, many of the larger intramural branches were involved by a granulomatous arteritis, with varying degrees of thrombosis. There were numerous foci of extensive arteritis, with a heavy cellular infiltrate involving the entire wall and perivascular tissue, destruction of the wall with deposition of hyaline fibrinoid material, and thrombosis. There were varying numbers of giant cells present in these lesions. As would be expected, in association with these vascular lesions were multiple foci of myocardial infarction. These were of various ages. Most of them were very recent events, with only the early changes of myocardial fiber necrosis. Others showed extensive disintegration of fibers, with numerous macrophages. Still other foci showed fairly extensive fibrous tissue, with no inflammatory cells, and only a few isolated surviving myocardial fibers. The latter were of several weeks' duration. The myocardial involvement was quite extensive; this is especially noteworthy considering the normal electrocardiograms.

"The right and left kidneys weighed 300 and 330 gm. respectively. Both were somewhat pale and swollen, and there were several small recent cortical infarcts. Several of the smaller renal arteries contained thrombi on gross inspection. Microscopically, there was granulomatous arteritis involving many arteries, similar to the lesions in the myocardial vessels. Many of these vessels contained abundant fibrinoid material with necrosis of the vessel wall and occlusion (Figure 3). These lesions involved afferent and efferent arterioles, and even occasional glomerular capillaries. A few glomeruli showed necrotizing glomerulitis of capillary loops, but this was not a prominent feature. Many of the vascular lesions contained giant cells, but others did not.

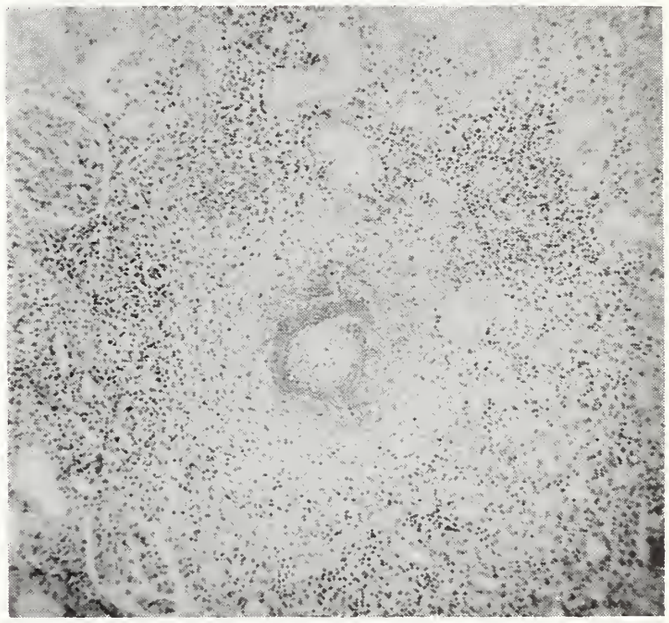

Figure 3.

"In the lower pole of the left kidney was an area of hemorrhage, with extension through the cortex, with rupture of the capsule and formation of a large perirenal and retroperitoneal hematoma. This involved the distal transverse and proximal descending colon and correlates well with the clinical picture of left flank mass with pain, ileus and drop in hematocrit which occurred several days prior to death. This complication has

been reported in polyarteritis nodosa with renal involvement.

"Other lesions included multiple infarcts of the spleen, involving approximately 80 per cent of the spleen. The vessels showed lesions similar to those in the heart and kidneys.

"There were several small infarcts in each adrenal, with vascular lesions similar to those described in other organs. In addition, occasional arterial lesions were seen in the liver, pancreas, esophagus, and skeletal muscle. Several lesions seen in skeletal muscle are indistinguishable from and would be interpreted as polyarteritis nodosa or dermatomyositis, if obtained as an isolated muscle biopsy.

"We are putting all these changes together under the name of Wegener's granulomatosis. As Dr. Tyler stated, the clinical picture is characteristic of this disease. Likewise, the pathologic alterations are typical of those described in this disease. However, this does nothing as far as elucidating the etiology. Many consider it to be a variant of polyarteritis, and it is undoubtedly related to it. It is set apart from it and other diseases characterized by vasculitis and glomerulitis by the clinical sequence of initial middle ear, sinus, and upper respiratory involvement, progressing to the pulmonary involvement and finally widespread vascular lesions, including glomerulitis. The severe necrotizing granulomas of the respiratory tract are not a part of polyarteritis nodosa. The constant glomerular lesions are also not a part of the usual case of polyarteritis. A hypersensitivity state has been postulated in the pathogenesis of this condition, with an inhaled agent as the antigen, causing the initial pulmonary lesions, particularly the bronchial and upper respiratory tract involvement. However, as in this patient, clinical stigmata or a history of allergy are usually absent."

RESPONSE TO STEROIDS

Dr. Herbert G. Langford: "Does this process respond to steroids?"

Dr. Tyler: "I can tell you what I have read. As you might expect, there is divided opinion on this. In the July 1960 *JAMA*[1] case report, steroids were thought to possibly induce a remission of five months but not to alter the course of the disease. In the *American Review of Respiratory Disease* in 1962[3] a case surviving 16 months is documented, and again there is a question regarding the role of steroids. The best suggestion, I think (it is still not proof) that steroids at least slow down this process is found in the *American Journal of Medicine*[2] article. One of the cases reported had bilateral ocular involvement. While ACTH in large doses was given, some vision remained. When ACTH was stopped, the patient became totally blind. When it was restarted, some vision returned. If the diagnosis proves to be valid, I think this is good evidence that under some circumstances ACTH will at least slow this process down. Recent reports[4, 5, 6, 7] agree that large doses of steroid may be associated with reduction of acute symptoms and chest x-rays may show clearing of widespread lesions, but the effect on the progress of the renal disease seems less marked."

NORMAL COURSE

Dr. Langford: "What is the normal course of this? How long does it usually take to die from this?"

Dr. Tyler: "Average duration of some 56 cases[8] was about 4 months. The shortest course I found, one reported in the *Archives of Pathology*[9] was 20 days in duration, but this was associated with massive hemorrhagic complications from the bronchi. Apparently this patient essentially drowned from his own bleeding bronchial mucosa. The longest survival of 48 months from the onset of upper respiratory symptoms is reported in the *American Journal of Medicine*[2] article referred to previously. This prolonged course is unusual and interestingly occurred in the 1930's (pre-antibiotics except sulfonamides)."

"The question of drug hypersensitivity particularly sulfas was raised in most if not all of the articles I scanned. No consensus was apparent. However, an almost universally reported finding was the recovery of *Staphylococcus,* usually *aureus,* from cultures of sputum, pharynxes, ears, and urine. Could this be a hypersensitivity to staphylococcus—at least in part?" ★★★

2500 North State St.

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TOO MANY WORDS, TOO MANY MEETINGS

At a recent University of Pennsylvania seminar on communications and medical research, janitors found a crumpled sheet of paper with doodles of boredom and the following lines of verse:

So much is said, so much is written
On all that's said and all that's written,
That those who say and those who write,
And those who pray and those who fight
Spend so much time
    Explaining the crime,
    Eyeing the slime,
    Decrying the chime
    Of this giant verbosity,
Whose non-virtuosity, whose dead curiosity
Cries for one necessity: Less bark, more bite.

—*Medicine at Work*

Radiologic Seminar XXV: Pericardial Effusion

WILLIAM M. FLOWERS, JR., M.D.
Jackson, Mississippi

When examining a routine chest radiograph, one tends to think of the cardiac silhouette in terms of the underlying chambers and myocardial walls and to forget that technically what one actually sees in profile along the heart borders is the pericardium. Since the normal pericardium is only a millimeter or so in thickness, this oversight is of little importance. When, however, a significant amount of fluid collects in the pericardial sac, an appreciation of the presence and anatomy of the pericardium is essential if a correct radiologic diagnosis is to be made.

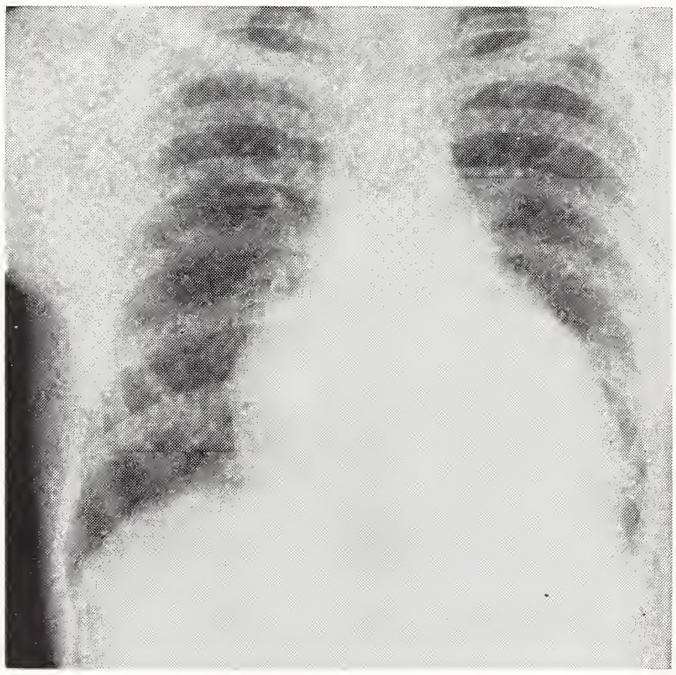

Figure 1. Pericardial effusion in a seventeen year old male.

It apparently takes 300 to 500 milliliters of fluid in the pericardial sac to produce a significant alteration in the size and contour of the cardiac silhouette. Even when gross enlargement is apparent on the radiograph, it is a common error to fail to appreciate that the increase in size represents pericardial fluid rather than enlargement of the heart itself. The reason is obvious, when one considers that the radiographic density of the pericardium, pericardial fluid, myocardium and blood in the heart chambers is essentially similar.

In the classical radiographic pattern one sees a considerably enlarged cardiac contour with a globular or water bottle configuration, usually with no significant increase in the prominence of the hilar or parenchymal vascular markings (Fig-

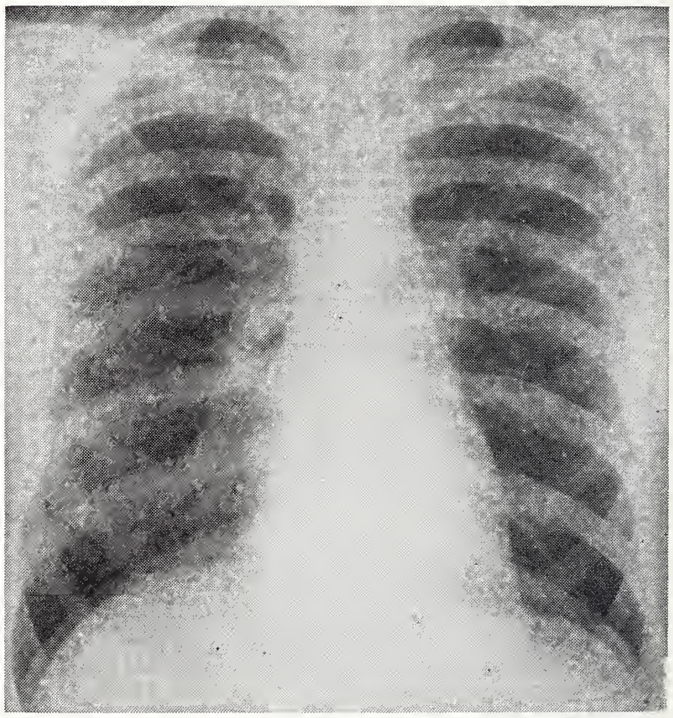

Figure 2. Normal cardiac contour seven weeks later, following clearing of the effusion.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, University of Mississippi Medical Center.

Figure 3. Pericardial effusion in a 51-year-old male with carcinoma of the esophagus with metastasis to the pericardium. Note classical globular contour with no distention of hilar or parenchymal vascular markings.

ures 1 and 3). This disparity between the size of the cardiac contour and the pulmonary vasculature may be one of the most significant clues on a routine chest film.

Frequently, however, the radiographic findings are not classical, and a high index of suspicion is necessary to arrive at the correct interpretation. Fluoroscopy is diagnostic if no pulsations are detected along the borders of the distended pericardium, but diminished or feeble pulsations must be distinguished from a dilated heart in myocardial failure. Special procedures such as angiocardiography and radioisotope scanning have at times proven useful in differentiating the lumen of the cardiac chambers from the border of the cardiac silhouette. If a pericardial tap is done, a diagnostic pneumopericardium will produce a striking and characteristic appearance (Figure 4). The thickness of the pericardium and the actual heart size can be well demonstrated.

Another point to be recalled is that it takes a period of days for the pericardium to stretch enough and for the fluid to form in the so-called classical picture. In the acute situation, such as bleeding into the pericardial sac following trauma

Figure 4. Diagnostic pneumopericardium in same patient. The heart and pericardium are outlined by air within the pericardial sac, and a fluid level is demonstrated. The pericardium is of normal thickness. (Retouched)

with acute tamponade, one will not see any change in the size or contour of the cardiac silhouette on a radiograph. ★★★

2500 North State St.

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FELLOW SUFFERERS

Two psychiatrists met on the street one day, and one said to the other, "You're fine. How am I?"

The President Speaking

'A Whack at Quacks'

JOHN G. ARCHER, M.D.
Greenville, Mississippi

A CHRONIC AILMENT afflicts the statutes on health care in this nation, because quacks still flourish. In other areas of personal, economic, and social endeavor, the law is clear enough. A banker is rigidly regulated, and his stewardship accounting must be perfect. A builder must meet specifications and building codes or he gets no pay for his work. The stockbroker sells only the purest securities or the SEC can literally put him out of business. Insurance must meet the most exacting fiscal and legal minimums.

But 47 states have laws which proclaim that disease can be cured by a punch in the spine. Alfalfa pills are freely sold for the relief of arthritis. People are permitted to pay out hard-earned money to sit in uranium tunnels to receive the "therapeutic benefits" of nature's healing radiation. Patent medicines are still with us: Instead of the medicine show, it's the TV spectacular, but the pitch on self-medication is still the same.

In less than two weeks when our 96th Annual Session convenes at Jackson, the association will present a Congress on Health Quackery. In this unique general session, a spade will be called a spade and a quack will be called a quack. Outstanding authorities on health quackery will appear. The occasion is not just for association members; it is also for the enlightenment of the public. Physicians are encouraged to invite as their guests those in business, civic, cultural, and other areas of community leadership. Let us take the first step toward protecting the resource of health with the same concern given the building project, insurance policy, stock certificate, and the dollar. ★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume V, Number 5

May 1964

EDITORIALS

Who Steals My Purse: A Saga of Federal Flim-Flam

Who steals my purse steals trash; 'tis something, nothing;
'Twas mine, 'tis his, and has been slave to thousands;
But he that filches from me my good name,
Robs me of that which not enriches him,
And makes me poor indeed.
—Othello, Act III, Scene III

I

The villainous lieutenant of the Moor of Venice might just as well have been declaiming about the Social Security system which, as a tax, makes one's purse slave to thousands, enriches nobody, and is likely as not to make the wage earner poor indeed. The pity of it all is the mislabeling, the empty promise, and the hopeless aspirations of its proponents. It is merchandised for what it is not; it is accorded capabilities which it does not possess; and it is being aimed in a direction which threatens the finest, most readily available system of medical care in the history of the world.

Many, if not most, Americans in the labor force like to think that they, their employers, and the federal government are prudent partners, salting away the wherewithal for a happy retirement when the fruits of personal industry may be used for the better life in the best years. They are convinced that they are insured against want with a vestment which has been purchased and paid for during productive years. That there is evidence aplenty to the contrary doesn't disturb them in the least, because their own government is telling them every day about their "insured benefits."

Of more recent vintage is another rosy promise, all the medical care they'll need in the golden years under the same system, purchased for a mere 25 cents a week during lives of productivity. And this is one reason why nobody who is armed with the facts doubts for a minute why Barnum ended up a millionaire.

II

The Jackson Social Security Office publishes a chatty little bulletin about all the good things the system brings us. Of particular interest was the March 1964 issue which proclaimed that a number of "items of information (about Social Security) 'are so' and we hope (to) correct some ideas you may have about Social Security that 'ain't so.'" A couple deserve examination and discussion.

"Social Security is not going broke," the bulletin asserts. "Present assets are over $20 billion. The present tax structure will pay all benefits in the future under the present law."

By almost any test of understanding, this statement seems to mean that the system is solvent, has ample funds with which to meet its obligations, and assured income covering its future commitments. The facts, unhappily enough, suggest a different set of circumstances. Recently, the

distinguished actuary, Ray M. Peterson, vice president of Equitable Life, was moved to speak out on Social Security financing, and, as he put it, "to set the record straight by portraying an accurate picture of the financing mechanism as now operating and by exposing the distortion and misrepresentation, no matter what its origin." Continued Mr. Peterson: "Another purpose, and the main one, is to show that there are excellent reasons for grave concern as to the probable ultimate effects of continued distortion and misrepresentation by interpreters of the Social Security Act, by statements of inadequately informed members of Congress, and even by publications of the Social Security Administration itself."

He points out that there are only two possible approaches as extremes in financing a national old age pension program: "pay-as-you-go" and full reserve. The former is the darling of the social planners, and it means simply that the government takes enough in taxes to pay the costs of benefits currently due. This is the basic concept of "social insurance." The latter, full reserve financing, is what insurance people equate with actuarial soundness, generally the only concept of this which the American people understand.

III

In *Flemming v. Nestor,* the Supreme Court made it clear that nobody under Social Security has a vested interst in a single cent previously paid into the program. The Court said that "the program is financed through a payroll tax" and that "persons gainfully employed, and those who employ them, are taxed to permit the payment of benefits to the retired and disabled, and their dependents." What's more, benefits expected or promised "are not dependent on the degree to which he (the employee) was called upon to support the system by taxation."

It is also clear that no contract exists between the government and its beneficiary. As a matter of fact, the Congress can—and has on occasion—changed the entire Social Security system by a simple majority of one vote. It could even abolish it without a penny's liability to a single citizen.

Not only, then, is "insurance" a misnomer, but "benefit" is also. In fact, the reason why Social Security payments are exempt from federal income tax is because they have been held to be a *gratuity* of the government. In *Helvering v. Davis,* the government contended that Social Security benefits were for the general welfare and that the levy to pay for them "must be a tax within the meaning of the Constitution." The Court ruled that taxes so paid into the treasury *"are not earmarked in any way."*

This seems to raise a question as to the accuracy of another point made in the Jackson Social Security Office bulletin: "Social Security is not welfare. It is social insurance bought and paid for by the worker and his employer and the self-employed." Since the *Helvering v. Davis* ruling still stands, then this purchase of security, "bought and paid for," is a strange transaction, indeed.

IV

During the period 1956-65, tax collections under Social Security for the OASDI title will be $115.1 billion, and OASDI benefits paid out will total about $114.5 billion. This scoreboard proves the pay-as-you-go concept which might be more accurately described as hope-as-you-pay. But the number of aged citizens is rapidly increasing, and the revenue-payout gap must therefore widen. Under the present law—if not a single change is made—Social Security taxes will rise to nearly 10 per cent of the wage base.

But if the taxes should cease by 1965, an unlikely but pertinent assumption, there would be available only 20 per cent of the benefits due in the so-called trust fund and *not a nickel for those not now on the payment rolls.* It is apparent that whether Social Security is broke or not is merely a matter of definition.

"I will be glad to explain how the fertility rite takes place. First, the woman takes her temperature each morning, then . . ."

To this system, so crassly misrepresented and distorted, the social welfare proponents would tie medical care, beginning with King-Anderson-type legislation for the aging. If that ever comes to pass, most Amercians can join Othello's lieutenant, Iago, in honestly saying, "Who steals my purse steals trash."—R.B.K.

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The Fine Print Takes It Away

An old saying has it that the big print gives it to you and the fine print takes it away. Perhaps this is what is happening in the matter of control of sources of ionizing radiation. In 1960, the Congress amended the Atomic Energy Act to permit states desiring and capable of doing so to enter into agreements with AEC and transfer regulatory jurisdiction over certain nuclear byproducts, source, and special materials from federal to local control.

In 1962, Mississippi became the second state to conclude such an agreement, and the State Board of Health was designated as the control agency. A Radiological Health Unit was established within the Board's headquarters, and an effective program was initiated. The list of states assuming this responsibility has now risen to six, including Arkansas, California, Kentucky, New York, and Texas. Comes now the Department of Labor which has published new health and safety regulations applicable to federal contractors under the Walsh-Healey Public Contracts Act. These six states must now show why the new regulations should not apply to them, the AEC agreements notwithstanding.

In the first place, the Congress decreed no dual jurisdiction over the same source of ionizing radiation, or the AEC-state agreements would have never been authorized. But the new Labor regulations go even further by extending federal control over *all* radiation sources, including industrial x-ray, particle accelerators, high energy electron tubes, radium, and what-have-you. This is a bold arrogation of authority, because control of x-ray and radium has always been under state jurisdiction. Surely, there will be legal tests of the Labor Department's action, because neither the intent of the Congress nor the sovereignty of the states should be thus usurped.—R.B.K.

Syllabic Surgery For Philologic Lesions

There's a new medical organization, but it has yet to prove its worth and establish its need. The National Association on Standard Medical Vocabulary has been founded to simplify, standardize, and clarify medical terminology. The association's chairman is Dr. J. E. Schmidt of Charlestown, Ind., and the board of directors includes such distinguished members as Drs. George M. Fister and Karl Menninger.

With tongue in cheek, NASMV says that the language of medicine "is pocked by philologic lesions, including excessive synonomy, polysemia, inconsistent spelling, antithesis, and polyepy." Anybody who doesn't have access to a $50 dictionary will never know what these grave charges against the majesty of the literature really amount to.

Whether this effort is necessary or not remains to be seen. JOURNAL MSMA has never received a single letter of protest over the vagueness of synonyms such as photodynia, photalgia, photodysphoria, and photophobia. Nor have we been taken to task over structural variants such as heterotaxis, heterotaxia, and heterotaxy. And if anybody doubts the forward thrust of medical science, let him contemplate hepaticocholangiocholecystenterostomy.

That beats the old parlor game champ, antidisestablishmentarianism, by exactly nine letters. —R.B.K.

DEATHS

BURK, THOMAS, Zachary, La. M.D., Memphis Hospital Medical College, Tenn., 1911; member American Public Health Association and the Mississippi Public Health Association; past president of Tri-County Medical Society and secretary of Amite-Wilkinson Counties Medical Society; Emeritus member of MSMA and member of the Fifty Year Club; died March 10, 1964, aged 84.

WOLFORD, THOMAS FOXWORTH, Columbus. M.D., Northwestern University Medical School, Chicago, Ill., 1931; interned Hillman Hospital, Birmingham, Ala., one year; residency, Birmingham Baptist Hospitals, Ala.; member Southeastern Surgical Congress and the Southern Medical Association; Fellow, American College of Surgeons and the International College of Surgeons; died March 8, 1964, aged 58.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

BLALACK, EDWIN EUGENE, Amory. Born Memphis, Tenn., Jan. 24, 1925; M.D., University of Tennessee College of Medicine, Memphis, 1952; interned John Gaston Hospital, Memphis, Tenn., one year; residency, John Gaston Hospital, Memphis, Tenn., three years; member American College of Radiology; certified by the American Board of Radiology; captain, U. S. Air Force, three years; elected March 10, 1964, by Northeast Mississippi Medical Society.

FAIRCHILD, HILTON MCKAY, Grenada. Born Carthage, Miss., Jan. 17, 1935; M.D., University of Mississippi School of Medicine, Jackson, 1961; interned University of Mississippi School of Medicine, Jackson, one year; director of Public Health Service for Tallahatchie, Yalobusha, and Grenada Counties; elected March 11, 1964, by North Central District Medical Society.

HOUSE, JAMES ROBERT, JR., Mississippi City. Born Neshoba County, Miss., Sept. 25, 1934; M.D., University of Mississippi School of Medicine, Jackson, 1962; interned Duval Medical Center, Jacksonville, Fla., and at the Mississippi Baptist Hospital, Jackson; elected Jan. 8, 1964, by Coast Counties Medical Society.

PRESSLER, JAMES WILLIAM, McComb. Born Port Arthur, Tex., Dec. 18, 1929; M.D., University of Texas Medical Branch, Galveston, 1960; interned U. S. Public Health Service Hospital, New Orleans, La., one year; elected Dec. 18, 1963, by Tri-County Medical Society.

SANDERS, JAMES WILLIAM, III, Meridian. Born DeRidder, La., June 4, 1931; M.D., Louisiana State University School of Medicine, New Orleans, 1956; interned U. S. Naval Hospital, Pensacola, Fla., one year; ob-gyn residency, U. S. Naval Hospital, Philadelphia, Penn.; lt. commander, U. S. Navy, elected Feb. 4, 1964, by East Mississippi Medical Society.

THOMPSON, WILLIAM BURKE, Jackson. Born Hattiesburg, Miss., June 7, 1933; M.D., University of Mississippi School of Medicine, Jackson, 1958; interned University of Mississippi School of Medicine, Jackson, one year; orthopedic residency, University of Mississippi School of Medicine, Jackson, three years; orthopedic residency, Mississippi Baptist Hospital, Jackson, one year; elected March 3, 1964, by Central Medical Society.

PERSONALS

RALPH L. BROCK has been named president of the McComb Rotary Club.

WALTER E. JOHNSTON, who drowned in the Yazoo River in January, will be the subject of a memorial to be established by the city of Vicksburg. Memorial plans were opened with a special showing of the famed "Gold in the Hills" on the Showboat Sprague. All proceeds from the special performance went to the memorial fund. Dr. Johnston played the hero's role in "Gold in the Hills" for many many years. He spearheaded the efforts that secured the steamer Sprague for the city of Vicksburg as an historical museum.

S. H. MCDONNINEAL, JR., has been named president of the Jackson Civitan Club.

O. P. MYERS was recently named president of the Baptist Hospital medical staff. Other officers named were: HOWARD H. NICHOLS, president-elect; J. MANNING HUDSON, vice president; ROBERT P. HENDERSON, secretary. New chiefs of staff are HARDY B. WOODBRIDGE, JR., general practice; CLINTON E. WALLACE, medicine; THOMAS K. WILLIAMS, surgery; OTIS B. WOOLEY, JR., obstetrics-gynecology, and CECIL G. JENKINS, pediatrics.

JAMES T. THOMPSON of Moss Point was named Outstanding Citizen of Jackson County at the Pascagoula Business and Professional Club's annual awards banquet.

Book Reviews

Office Urology. Edited by Roderick D. Turner, M.D., Assistant Professor of Surgery (Urology), University of California School of Medicine. 327 pages with illustrations. New York: McGraw-Hill Book Company, Inc., 1963. $13.50.

This book is the work of Dr. Roderick D. Turner in collaboration with 18 others who are experienced in office work-up. From these writers, one gets a good cross section of urological proceddures, diagnosis, and treatments that can be done in the office. It is written primarily for the general practitioner and residents in urology as a guide to help with urological procedures which can be done in the office. It thoroughly discusses the procedures which help one to diagnose and treat urological problems. Such clarity is needed by other than urologists in the practice of medicine.

The two best chapters are chapter nine, kidney function test, and chapter twenty-five, clinical aids. These are excellently written except for the part dealing with radioisotope renogram, which is a hospital procedure, and then only in certain select medical centers in the United States. At the present, the average hospital does not have such equipment due to the expense.

Chapters 20 and 21 dealing with neurological conditions are somewhat over-written and verbose to be of much value. One has to search very hard to find the salient features to be of much value in differential diagnosis.

In summation, the editor, Dr. Roderick D. Turner has provided a guide for the general practitioner and resident for obtaining clarity of office urology procedures.

FRANK L. RAMSAY, M.D.

Diseases of the Chest. Second edition. By H. Corwin Hinshaw, M.D., Ph.D., and L. Henry Garland, M.B., B.Ch., M.D. 798 pages with illustrations. Philadelphia: W. B. Saunders Company, 1963. $20.00.

During the past few years much progress has been made in the pulmonary disease field. This book "Diseases of the Chest" by Hinshaw and Garland, brings these changes to our attention in a most vivid manner. The changes brought about by the antimicrobial studies against tuberculosis and fungal diseases; the clear and concise means of diagnosing and treating tuberculosis, and the changing concepts about chronic bronchitis and emphysema bring more clearly to our attention the need for personal and public preventive medicine. Our public health agencies are acutely aware of the importance of these needs, since tuberculosis is on the increase.

The first four chapters are devoted to the diagnostic procedures of history taking, physical examinations, laboratory studies, and radiological examination. There are three chapters by other authors: (1) Clinical Application of Pulmonary Function Testing, by Dr. Charles Carmon, (2) Foreign Bodies in the Larynx and Tracheobronchial Tree, by Dr. Walter E. Heck, (3) Coccidioidomycosis, by Dr. William A. Winn. These chapters are excellent and will be found to be of practical value to physicians.

There are thirty-eight chapters in all, with seven hundred ninety-eight pages. Many useful tables and illustrations are found throughout the book. The x-ray illustrations are excellent. There are chapters dealing with our more common diseases of the chest, along with some new entities. Cardiology has been omitted, but there are excellent chapters on pulmonary heart disease, pulmonary embolism and other vascular disorders.

In the preface, the authors state, "It has been our object to write for the nonspecialist and to avoid scholarly discussions related to the practice of medicine." Although this book was written primarily for internists and general practitioners, I feel that every chest specialist as well, will want to own a copy for reference.

ROBERT E. SCHWARTZ, M.D.

Pediatric Cardiology. Second edition. By Alexander S. Nadas, M.D., Associate Clinical Professor of Pediatrics, Harvard Medical School; Cardiologist, The Children's Hospital; Physician, Sharon Cardiovascular Unit, Children's Hospital Medical Center, Boston. 828 pages with 527 illustrations. Philadelphia: W. B. Saunders Company, 1963. $16.00.

The author, one of the world's most renowned pediatric cardiologists, has enlarged this edition

with the latest knowledge in the field, more illustrations, and a larger bibliography. He has, I feel, retained some of the "do-it-yourself" quality of the first edition. This new edition is certainly not to be considered a handbook as it is more complete and more detailed than similar texts.

The book is divided into three parts: The tools of diagnosis, acquired heart disease, and congenital heart disease. Following these is a list of 766 references and an appendix with 25 tables. I found these tables to be especially good, covering a wide variety of subjects. They will save time when the information is needed quickly. A very complete index composes the last 28 pages.

As a practicing pediatrician I found the first section, tools of diagnosis, to be the most valuable. Some areas were more detailed than I felt were necessary but were still readable. The chapter on electrocardiography was especially good and well presented.

Part two, acquired heart disease, was very complete. The clinical descriptions, electrocardiograms, and radiographs made this section valuable.

Almost half the book dealt with congenital heart disease. An excellent chapter on general principles gave this reader a better understanding of the physiologic principles involved. Almost every condition discussed had cardiac catheterization data presented in a fine illustration. Details of surgical procedures were omitted and undoubtedly will be missed by some.

Pediatricians, students, and general practitioners will find this excellent book invaluable. It is detailed and many illustrations of laboratory data are given. The clinical descriptions and discussions of management of specific conditions are splendidly presented.

JOSEPH B. MILLER, JR., M.D.

Internal Medicine in World War II: Infectious Diseases. Volume 2. Prepared by the Medical Department, United States Army, Colonel John Boyd Coates, Jr., M.C., editor-in-chief, and W. Paul Havens, Jr., M.D., editor for internal medicine, Office of the Surgeon General. 649 pages. Washington: U. S. Government Printing Office, 1963. $6.75.

Most of the infectious disease problems encountered by the United States Armed Forces during World War II are covered in this volume. The editor compiled the contributions of 19 authors who are eminently qualified to make this important documentation. In most instances, the authors were not only actively engaged in the study of these diseases at that time, but also helped to create and record the data on which this medical history is based.

World War II was the first major war wherein our losses to disease were less than those on the battlefields. Significant instances in the history of infectious diseases were apparent during this period, and it was important that a full and accurate account of these accomplishments be made. This volume reports these recordings in a highly commendable manner.

Chapters are devoted to diseases which are customarily and frequently found in the United States. This list includes the respiratory diseases, rheumatic fever, meningococcal infections, and tuberculosis. Chapters are also devoted to other diseases such as typhus fevers, neurotrophic virus disease, Q fever, sandfly fever, dengue, and cutaneous diphtheria. The great reduction in manpower loss from venereal disease after its treatment on an out-patient basis was inaugurated, is well recorded. The army's role in the eradication of malaria is equally well documented. The book is well illustrated with 172 photographs, drawings, charts, and tables.

This history of the United States Army Medical Department in World War II described the epoch-making events responsible for the triumph of military medicine during a major world conflict. This publication is invaluable for medical historians, physicians concerned with infectious diseases, and persons in the armed forces or elsewhere who in the future may be called upon to shoulder the responsibility of the health of the nation during a major conflict.

JOHN F. BUSEY, M.D.

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MSMA Opposes Chiropractic Bid For State Licensure and Recognition

Mississippi's dwindling cult of chiropractic has made its second bid in two years for licensure and recognition under state law with introduction of House Bill 624 in the 1964 regular session of the legislature. The measure, sponsored by nine members of the House of Representatives, went into the hopper during the second week in April.

Dr. William E. Lotterhos of Jackson, state association legislative chairman, said that HB 624 "is virtually identical to HB 344 which was overwhelmingly defeated in committee in 1962." He added that the association's position of opposing licensure, sanction, and recognition of a cult practice by the state was unchanged.

Sponsors of the new measure are Reps. William I. S. Thompson and William E. McKinley of Jackson, Noel McGaughey of Prentiss, Estus Graham and T. G. Nixon of Laurel, R. L. Lassiter of Richton, Frank Shanahan of Vicksburg, John W. McGrew of Vossburg, and J. A. Miller of Leakesville. The bill was referred to the House Committee on Public Health and Quarantine, Rep. Odie Trenor, chairman.

"Despite the sweet-sounding title of the bill to 'regulate chiropractic,' " Dr. Lotterhos said, "it is a full bid for licensure, complete with a board of chiropractic examiners and provisions for reciprocity with other states which would encourage an influx of these cultists into Mississippi."

The state medical association will continue to oppose a double standard of care in Mississippi, Dr. Lotterhos added, because such would make a mockery of the profession, the splendid system of hospitals, the University of Mississippi School of Medicine, and the State Board of Health. He added that members of the association have been fully informed of the efforts of the cultists and of those sponsoring the legislation.

In 1962, a similar bid for licensure and recognition was made, but the measure was killed in the House committee after open hearings were conducted. With minor editorial and procedural exceptions, the present bill is identical to the ill-fated 1962 version.

The Mississippi State Medical Association has steadfastly maintained that chiropractic is a discredited cult dogma for which not a supporting shred of demonstrable scientific evidence exists. The current effort is the second in two years and the third attempt in 12 years, one having been made during the 1954 regular session only to meet defeat in the senate.

At the April 14-16 National Legal Conference sponsored by the American Medical Association at Chicago, speakers told the gathering of state medical association officers and legal counsel that every legitimate effort must be exerted to protect the public from the dangers of cult practices. Only Louisiana, Massachusetts, and Mississippi deny chiropractic any licensure and legality under their respective state laws.

Forty-seven states and the District of Columbia accord chiropractors some degree of licensure, but through restrictive legislative enactments and court decrees, the cult is being reduced and its practice privileges curtailed.

Dr. Lotterhos said that response from the grassroots has been encouraging and prompt. He expressed the belief that opposition to the measure is formidable but cautioned that interest and effort in this connection should be maintained during the closing days of the 1964 regular session.

North Society Honors Dr. Billy S. Guyton

North Mississippi Medical Society honored Dr. Billy S. Guyton of Oxford at their April 2 dinner meeting.

This year marks Dr. Guyton's 50th anniversary of membership in the Mississippi State Medical Association.

Toastmaster for the occasion was Dr. John R. Lovelace of Batesville, president of the Society.

Dr. LeRoy Wilkins of Clarksdale, MSMA past president gave the oration honoring Dr. Guyton.

The program also included scientific talks by Dr. Philip M. Lewis, professor of ophthalmology, University of Tennessee, and Dr. Sam H. Sanders,

Dr. Billy S. Guyton was honored April 2 by North Mississippi Medical Society in a program recognizing his 50 years of medical service. Shown with Dr. Guyton are, from left to right, MSMA President John G. Archer, Chancellor John D. Williams of the University of Mississippi, Dr. John Lovelace, president of North Society, and Dr. E. LeRoy Wilkins, orator.

professor of otolaryngology, University of Tennessee. Dr. Lewis spoke on "Management of Some Ocular Injuries and Common External Diseases," and Dr. Sanders discussed "Some of the Common Misconceptions of Sinus Diseases."

SMA Section Sets Deadline For Papers

The Section of Ophthalmology of the Southern Medical Association announces that papers for consideration for presentation at the Memphis meeting, Nov. 16-19, 1964, will be accepted only up to May 15.

The meeting this year under the chairmanship of Dr. Albert C. Esposito of Huntington, W. Va., will begin on Monday, Nov. 16, designated "Memphis Day" with live television surgery and then scientific papers in the afternoon. Dr. Philip M. Lewis of Memphis, chairman-elect of the section will coordinate the "Memphis Day" meeting.

Tuesday and Wednesday will be devoted to additional scientific papers with a Business Session at the conclusion of the scientific papers.

Papers for consideration should be sent at once to the secretary, Dr. George S. Ellis, 812 Maison Blanche Building, New Orleans, La.

Ob-Gyn Board Now Receiving Applications

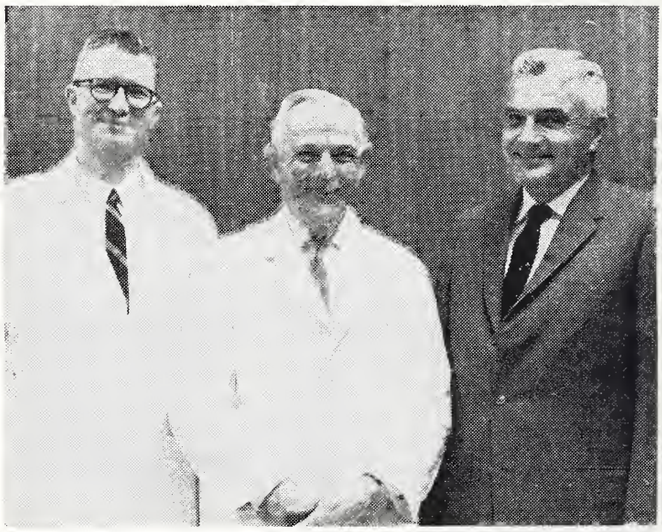
The American Board of Obstetrics and Gynecology has announced that applications for certification, letters requesting reopening of applications, and requests for re-examination are now being accepted in the office of the secretary.

All applications and letters of request must be submitted by July 1, 1964, and accompanied by duplicate lists of patients dismissed from service for the 12 months immediately preceding application.

Candidates are urged to carefully review the current Bulletin of the Board, with particular attention to the existing requirements before application is made.

Diplomates are requested to keep the Board office informed of their current address. More information and Bulletins may be obtained from Dr. Clyde L. Randall, secretary, 100 Meadow Road, Buffalo 16, New York.

Dr. Ochsner Addresses UMC Surgery Department



Dr. Alton Ochsner of New Orleans (center) was guest lecturer in the department of surgery, University of Mississippi School of Medicine. He is pictured with Dr. James D. Hardy (left), professor of surgery and chairman of the department, and Dr. J. Harvey Johnston, Jr., clinical associate professor of surgery.

State Morbidity Reported Through April 3

The Mississippi State Board of Health reports the following occurrence of morbidity for 1964 through the 14th week of the year, ending April 3, 1964. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	258
Tuberculosis, O. F.	61
Salmonella Infections	8
Brucellosis	1
Encephalitis, infectious	2
Dysentery	
Bacillary	14
Amoebic	2
Diphtheria	1
Septicemia, Staph.	1
Meningococcal infection	7
Meningitis, O. F.	8
Tularemia	1
Mononucleosis, infectious	23
Hepatitis, infectious	72
Tetanus	1
Helminthic infections	
Hookworm	241
Ascariasis	91
Strongyloides	11
Histoplasmosis	2
Streptococcus infections	
Scarlet fever	86
Strep throat	1,367
Pertussis	28
Measles	1,900
Chickenpox	508
Mumps	496
Influenza	272
Gonorrhea	1,410
Syphilis	
Early	85
Late	57

Dr. Mink To Head North Central Society

Dr. Paul E. Mink of Kosciusko has been elected president of the North Central District Medical Society. He succeeds Dr. William A. Middleton of Winona.

Dr. William E. Riecken, also of Kosciusko, was named society secretary succeeding Dr. Robert B. Townes, Jr. of Grenada.

The group voted to change their meeting schedule to the second Wednesday in June and December, and to meet in the society's counties as they fall in alphabetical order, beginning with Attala.

Dr. James H. Melvin and Dr. William B. Wiener, both of Jackson, presented scientific papers to the meeting.

April Designated Cancer Control Month

Governor Paul B. Johnson is shown signing the proclamation officially declaring April Cancer Control Month in Mississippi. Shown with Governor Johnson are (left to right) Richard C. Williams, state chairman for the 1964 Cancer Crusade; Dr. A. V. Beacham, president, American Cancer Society, Mississippi Division, and Dr. Forrest G. Bratley, president, American Cancer Society, Hinds County Unit.

May Schedule Set For Monday Seminars

Office surgery and liver disease will be subjects for the May Monday Night Seminars sponsored by the University of Mississippi School of Medicine.

On May 4 Dr. Raymond Martin will discuss office surgery. On May 18 Dr. Ralph Daniel will speak on recognizing liver disease and treatment of liver disease will be his subject for the May 25 lecture.

The weekly seminars are continuing education courses for practicing physicians and attendance is approved for category 1 postgraduate credit by the Mississippi Academy of General Practice. The seminars have been offered without tuition charge on a continuing basis during this academic year. This eight-week series is supported by an educational grant from Endo Foundation, Inc.

UMC Staff Hears Tufts Professor

Among the visiting authorities who lectured to staff and students at the University of Mississippi School of Medicine during January, was Dr. Benjamin E. Etsten (left), professor of anesthesiology at Tufts University College of Medicine, Boston, Mass. He is pictured with Dr. Leonard W. Fabian, professor of anesthesiology and chairman of the department at the University of Mississippi. Dr. Etsten spent three days in Jackson, Jan. 26 to 29.

Dr. Carr Receives Fifty Year Award

Dr. Isaac Carr was recently awarded the MSMA Fifty Year Club pin and certificate commemorating his 50 years of medical service to the people of Clarksdale. Dr. John G. Archer of Greenville, MSMA president, made the presentation at the semi-annual meeting of the Clarksdale and Six Counties Medical Society.

A native of Pontotoc, Dr. Carr came to Clarksdale in 1914 and entered practice with the late Dr. John Primrose. In 1916 he entered private practice in the McWilliams Building in Clarksdale where he has maintained his offices up to the present time.

Dr. Carr graduated from Mississippi State University, obtained his medical degree from Tulane University School of Medicine, and served an internship at Charity Hospital in Vicksburg. He is a member of MSMA, AMA, and Clarksdale and Six Counties Medical Society.

Nasal Surgery Subject Of Cincinnati Course

An international postgraduate course in "Introduction to Fundamentals of Reconstructive Surgery of the Nasal Septum and External Pyramid" will be presented at the University of Cincinnati College of Medicine and Christ Hospital, Cincinnati, May 5-15, 1964.

The course co-ordinator will be Dr. Raymond L. Hilsinger, assistant professor of otorhinolaryngology, University of Cincinnati. Dr. Maurice H. Cottle, professor of otorhinolaryngology, Chicago Medical School, and the American Rhinologic Society will cooperate in the presentation.

University Receives AMA-ERF Check for $11,686

Dr. Raymond F. Grenfell, center, chairman of the MSMA Committee for the American Medical Association Education and Research Foundation turns over a check for $11,686.61 to Dr. Robert Q. Marston, right, Dean of the University of Mississippi School of Medicine. Dr. Alton Bryant, Vice Chancellor of the University of Mississippi, Jackson medical campus, looks on.

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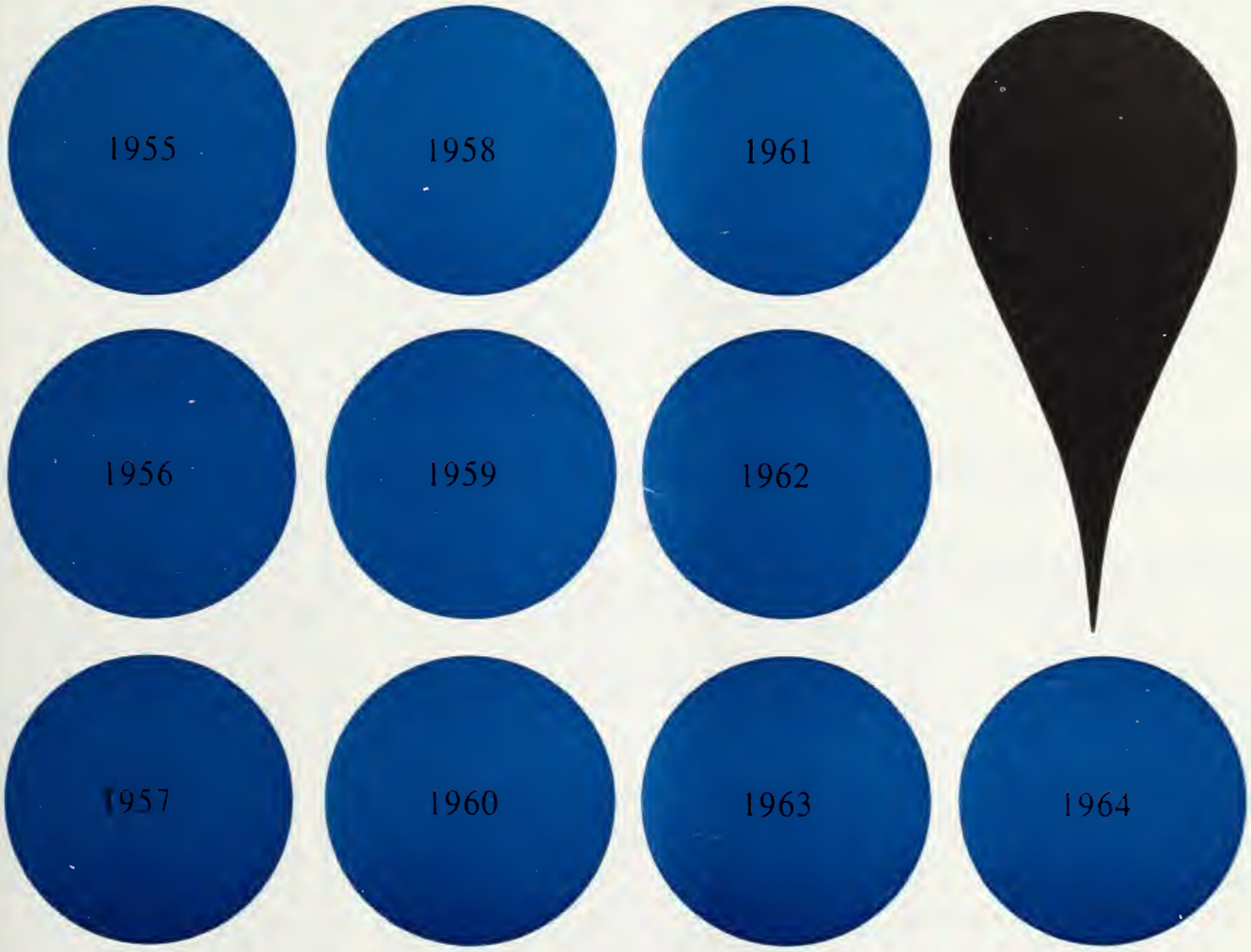

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ACS Donates Library Materials to New Schools

The American College of Surgeons has presented seven new medical schools in the United States with a gift of 12,345 volumes of scientific journals and 752 textbooks.

"Allocation to these new medical schools was made because the College's board of regents felt that medical students at these new schools could profit most from this generous donation," said Dr. John Paul North, Chicago, director of the ACS. "These materials will form a valuable nucleus for their own new libraries."

The board of regents voted to dispose of these materials when the College's library was recently changed to an historical collection, with particular emphasis upon American surgery, Dr. North said.

Medical school recipients, and the total number of volumes they received are: University of Arizona, Tucson, 1,192; Brown University, Providence, 2,432; Albert Einstein College of Medicine, New York, 319; University of Kentucky, Lexington, 2,881; University of New Mexico, Albuquerque, 2,556; Seton Hall College of Medicine and Dentistry, Jersey City, 589; and West Virginia University, Morgantown, 3,127.

The gifts have been enthusiastically received, according to Dr. North, fulfilling the regents' understanding "that new schools need help more than many of the more venerable medical schools in building quality medical libraries to help new programs of medical education."

Donations to the medical schools fall into three categories: 233 sets of bound volumes of medical journals in English, French, and German; 225 sets of medical journals in other foreign languages; 86 sets of miscellaneous medical serials such as transactions, congresses, proceedings, and collected works from departments and clinics.

Allocation to each school was made by lot, after the schools had indicated their preferences. Librarians came to Chicago and made their selections.

The American College of Surgeons library, housed in the new headquarters building at 55 East Erie St., Chicago, currently has more than 2,300 rare historical volumes, one of the finest collections anywhere of books and items marking eras in the history of surgery, said Dr. North.

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Psychiatry for Internists Course Announced

A postgraduate course in psychiatry for internists has been added to the list of courses recently announced by the American College of Physicians.

The course, Number 19 on the ACP schedule, will be held June 15-19, 1964, at the Psychiatric Institute and the General Hospital of the University of Maryland School of Medicine. Dr. Ephraim T. Lisansky, associate professor of medicine and assistant professor of psychiatry at the University, is director.

One-half of the five-day session will be devoted to panel discussions of current concepts of personality development, psychopathology, psychiatric emergencies, and psychoneurosis and psychosomatic problems encountered in the practice of internal medicine. At other times, registrants will learn interviewing techniques and participate in patient interviews.

The postgraduate course, titled "Psychiatry for Internists," is part of the American College of Physicians' continuing education program for practicing physicians.

A.M.A. Film Bookings Show 16.8 Per Cent Increase

Film bookings by the American Medical Association during 1963 showed a gain of 16.8 per cent over the previous year. This marked the 11th consecutive year that the association's film library reported increased use of its 400 films.

A total of 9,979 film bookings in 1963 represented a 1,435 increase over the previous year.

The greatest increase in film bookings was to nursing schools with a mailing of 2,727 or an increase of 61.7 per cent. The next biggest gain was to para-medical schools, which include pharmacy, dentistry, medical technologists and others. The booking increase was 252 or 30.1 per cent.

Bookings to practically every medical school in the country totaled 1,158, an increase of 127 or 12.3 per cent while the total bookings to civilian hospitals was 2,323, a gain of 213 or 10.1 per cent.

Mr. Ralph Creer, A.M.A. director of Medical Motion Pictures and Television, reported that the library now has approximately 1,300 prints covering the 400 subjects.

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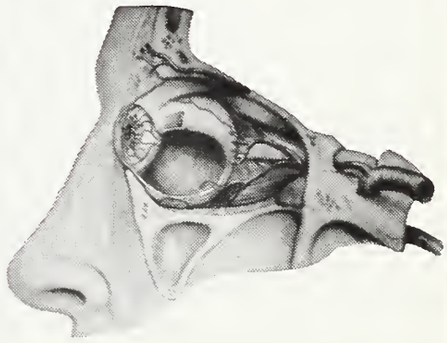

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Volume V
Number 6
June 1964

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The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, $5 per annum; $1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

June 1964

Dear Doctor:

LBJ's politically inspired "war on poverty" is gunning for medical care in the 10 state mythical land of Appalachia. New bill in Congress, S. 2782, offers 4-for-1 federal funds for hospitals, regional health diagnostic and treatment centers, and other facilities necessary for health, all in addition to present funds for Hill-Burton and mental health programs.

> But the frosting on the poverty cake is that bill also pays 100 per cent of operating costs for two years. Thereafter, 50 per cent of such costs are paid for three years. Measure is up for hearing before senate Public Works Committee, keeper of the federal pork barrel.

English-speaking denture wearers have more difficulty talking than any other language group. This is the finding of Dr. Howard Kessler, Cleveland dentist-speech therapist, who says sounds of "n, l, t, d, s, and z" bug edentulous-but-dentured Anglo-Saxons. Kessler feels problem, not encountered by Romance language nations, is ignored by dental schools which have research opportunity.

The airlines have come up with new figures proving that the big jets are easier on the stomach than the old twin engine piston planes. Studies show that only one jet passenger in 10,000 experiences air sickness against one in a hundred on DC-3's. Other comfort factors are radar-smoothed courses and less apprehension over flying.

The Democrats are shelling out money in support of fedicare to its chief proponents, the National Council of Senior Citizens. Records of Congress reflect contributions of $15,000 by Democratic National Committee during first two months of 1964. NCSC is headed by former Rep. Aime Forand, original fedicare sponsor.

The AFL-CIO went on record asking federal control over ionizing radiation sources in Arkansas, California, Kentucky, Mississippi, New York, and Texas. These are the six states with Atomic Energy Commission agreements giving local control under 1960 act of Congress, and most programs are medically supervised. Labor group says states can't do job adequately.

Sincerely,

Rowland B. Kennedy
Executive Secretary

Supreme Court Makes Key Rulings On Optometry

Jackson - The Mississippi Supreme Court handed down two divergent rulings on optometric practice, one sustaining the licensure board and another against it. In separate actions, the court upheld the state board's ruling forbiding window displays of eyeglasses as unethical advertising but prohibited the board's preventing an optometrist from fitting and selling hearing aids. Basis of latter decision was that board's powers are limited to regulation of optometric practice.

Senior Population Continues To Increase

Chicago - Insurance economics studies reflect continuing rapid rise of over-65 citizen population with predictions that the 20 million mark will be topped by 1970. Most rapid growth rate is in over-75 or advanced age subgroups. Senior women now outnumber men, with former at 9.8 million, 2 million more than latter, and sex gap is increasing. Relative increases in states are remarkable: Over-65 group has doubled in Arizona since 1960 and is up 50 per cent in three other states.

AMA Hits Non-Service-Connected VA Hospital Services

Washington - Hearings just completed by House Veterans Affairs Committee heard AMA witnesses reaffirm opposition to non-service-connected care program of VA hospital system. Measure under consideration would actually expand NSC program. AMA representatives estimated that bill would extend care to another 4 million veterans. MSMA reaffirmed its identical position at recent 96th Annual Session.

Federal Jurisdiction Is Denied In Hill-Burton Admissions

Springfield, Mo. - A federal district court refused jurisdiction of a suit alleging that hospital admissions policies could be federally controlled in Hill-Burton-financed institutions. Plaintiff sued because of hospital's refusal to admit him either as charity or pay patient. Court held that "Congress did not intend the federal government to have influence" in admissions policies. Case may be important, if appealed, as relates to recent Hill-Burton desegregation decision. Citation is Stanturf v. Sipes, 224 F. Supp. 883 (Mo., 1963).

Radiologists Will Initiate Costs Study

Chicago - The American College of Radiology is undertaking studies of costs in the practice of radiology. Recognizing that the specialty's overhead is substantially greater than that of most other types of practice, ACR also concedes that little factual data are available concerning costs and their relationship to services rendered. Famous firm of Price Waterhouse will conduct studies.

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CONTRAINDICATION: Anuria.

1. Steigmann, F., and Griffin, R.: Evaluation of Quinethazone, a New Diuretic. *J. Amer. Geriat. Soc.* 11:945 (Oct.) 1963.
2. Schwartz, M.: Office Evaluation of a New Diuretic in Patients with Hypertensive Diseases. Scientific Exhibit Presented at the Clinical Meeting of the American Medical Association, Los Angeles, California, Nov. 25-28, 1962.

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MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Meeting, June 21-25, 1964, San Francisco, Calif. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn, Chicago 10, Ill.

American College of Surgeons, Clinical Congress, Oct. 5-9, 1964, Chicago. Samuel P. Harbison, Secretary, 40 East Erie, Chicago 11, Ill.

Southern Medical Association, Nov. 16-19, 1964, Memphis, Tenn. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 10-13, 1965, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday January, First Wednesday March, May, July, September, November. Charles D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March, June, September, and December. William E. Riecken, Jr., P. O. Box 831, Kosciusko, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday April and October, Oxford. Vernon B. Harrison, P. O. Box 36, University, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucius Olen Crosby Memorial Hospital, Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
June 1964, Vol. V, No. 6

Intestinal Obstruction Resulting From Localized Peritonitis

WILLIAM O. BARNETT, M.D., and RICHARD L. YELVERTON, M.D.,
Jackson, Mississippi

The author reports a series of 25 cases of inflammatory obstruction resulting from localized peritonitis. Age and sex distribution, etiology, clinical and surgical findings, and treatment are discussed and the data analyzed.

Bacterial contamination of the peritoneal cavity, along with all the possible grave consequences of peritonitis, continues to occupy a prominent position of concern among those physicians who are responsible for the proper management of acute abdominal conditions. Fortunately, modern therapeutic modalities, when judiciously utilized, are capable of neutralizing many of the deleterious effects of generalized peritonitis with resulting localization and subsequent eradication of the inflammatory process. This report is concerned with those instances of mechanical intestinal obstruction which result from inflammatory adhesions following localized involvement of the visceral and parietal peritoneum. In most instances these adhesions are loose and filmy and can be expected to resolve with successful control of the infectious process. The following is a description of the various characteristics which were assembled during an analysis of 25 cases of inflammatory obstruction treated at the University of Mississippi Medical Center.

Age and Sex. Almost one-half of the cases fell between the age of 40 and 60 years. Sixty per cent of the cases were found in males.

Etiology. The most common cause of localized inflammatory intestinal obstruction in this series was acute appendicitis with perforation. The second most common etiologic condition was pelvic inflammatory disease while 2 cases were precipitated by perforated diverticulum (Table 1).

Prior Surgery. In a great majority of cases (16) there was no history of prior surgery. In 6 cases an appendectomy had been executed previously

TABLE 1

DISEASES WHICH WERE PRIMARILY RESPONSIBLE FOR THE DEVELOPMENT OF PERITONITIS

Diseases	*No. Cases*
Ruptured appendix	16
Pelvic inflammatory disease	5
Perforated diverticulum	2
Undetermined	2

From the Department of Surgery, University of Mississippi School of Medicine.

while 2 cases had sustained hysterectomy (Table 2).

TABLE 2

PRIOR SURGERY RECORDED FOR 25 CASES OF INFLAMMATORY OBSTRUCTION

Operative Procedure	*No. Cases*
Appendectomy	6
Hysterectomy	2
Prostatectomy	1
None	16

Preoperative Temperature. Five cases revealed practically no temperature elevation while 13 cases exhibited values less than 100°F. The remainder of cases revealed rather scattered figures for temperature but in only 1 was a level greater than 102°F recorded (Table 3).

TABLE 3

PREOPERATIVE TEMPERATURE RECORDED IN 25 CASES OF INFLAMMATORY OBSTRUCTION

Temperature (Degree Fahrenheit)	*No. Cases*
98.6- 98.9	5
99.0- 99.5	6
99.6- 99.9	2
100.0-100.5	3
100.6-100.9	2
101.0-100.5	5
101.6-101.9	1
102.0- +	1

Admission White Blood Cell Count. In almost one-third of the cases the white blood cell count was less than 10,000. A similar number of cases fell between 10,000 and 15,000 while an additionally similar group resulted in a figure between 15,000 and 20,000. In only 3 cases was the admission white blood cell count above 20,000 (Table 4). The highest count was 32,000, the lowest was 5,400 and the average was 13,690.

TABLE 4

DISTRIBUTION OF WBC COUNTS ON ADMISSION

White Blood Cell Count (Admission)	*No. Cases*
5,000- 9,999	7
10,000-14,999	7
15,000-19,999	8
20,000-24,999	1
25,000-29,999	1
30,000-34,999	1

Preoperative Radiologic Findings. Ninety-two per cent of the cases included in this study exhibited dilated small bowel along with air-fluid levels which were diagnostic for mechanical obstruction. In only 2 cases were x-ray studies negative in the presence of obstruction (Table 5).

TABLE 5

PREOPERATIVE X-RAY FINDINGS IN 25 CASES OF INFLAMMATORY INTESTINAL OBSTRUCTION

Radiologic Findings	*No. Cases*
Dilated small bowel	23
Air-fluid levels	23
Negative	2

Preoperative Peristalsis. Hyperactive bowel sounds were recorded in 22 cases while none were heard in only 3 instances (Table 6).

TABLE 6

PREOPERATIVE PERISTALSIS IN INFLAMMATORY SMALL BOWEL OBSTRUCTION

Peristalsis	*No. Cases*
Present	22
Absent	3

Operation. An operative procedure was carried out upon all 25 cases included in this report. Appendectomy was accomplished in 13 of the 16 patients with appendicitis. There were 6 cases in which the surgical treatment consisted of laparotomy only with drainage of an abscess. Colostomy was necessary in 4 cases for concomitant colon obstruction (Table 7).

TABLE 7

OPERATIVE PROCEDURES IN 25 CASES OF INFLAMMATORY OBSTRUCTION

Operation	*No. Cases*
Appendectomy	13
Laparotomy	6
Colostomy	4
Hysterectomy	1
Salpingectomy	1

Operative Lysis of Adhesions. A deliberate attempt was made in 16 cases to break down the inflammatory adhesions and restore bowel lumen continuity. The areas of localized peritonitis were not disturbed other than drainage of pus in the remaining 9 cases.

Use of Abdominal Drain. Abdominal drainage was not used in approximately two-thirds of the cases in this series. A soft rubber drain was employed in 9 (36 per cent) of cases.

Operative Decompression of Dilated Small Bowel. At the time of surgery it was elected to perform an enterostomy with extensive decompression of the small bowel by careful suction in 7 (28 per cent) of the cases. There were no complications occurring subsequent to this maneuver which could be attributed directly to its employment.

Complications. Eleven of the cases in this series pursued an uneventful recovery and exhibited no complications. There were 13 cases in which abdominal wall infections developed. The occurrence of an intra-abdominal collection of pus subsequently was seen in only 1 case and this was a right subphrenic abscess.

Antibiotics. The various antibiotics used were penicillin (19 cases), Streptomycin (16 cases), Chloromycetin (8 cases), Kantrex (3 cases) and Erythromycin (1 case). A combination of antibiotics was used in 23 cases while single antibiotic administration was employed in 2 cases. The combination most frequently used was penicillin, Chloromycetin, and Streptomycin. In 5 cases antibiotics were administered for 5 days or less. The duration of antibiotic therapy was 6 to 15 days in 18 cases while 3 cases were treated for 15 to 19 days (Table 8). The longest period of antibiotic use was 19 days, while the shortest time was 3 days and the average duration was 9.5 days.

TABLE 8

DURATION OF ANTIBIOTIC THERAPY IN 25 CASES OF INFLAMMATORY OBSTRUCTION

Days	*No. Cases*
1-5	5
6-10	8
11-15	10
15-19	3

Postoperative Temperature. During the postoperative period the highest temperature reading was less than 100°F in 7 cases. In 7 cases it was 101°F or more while 11 cases exhibited a peak postoperative temperature between 100° and 101°F (Table 9).

TABLE 9

HIGHEST TEMPERATURE READING DURING THE POSTOPERATIVE PERIOD

Temperature	*No. Cases*
98.6- 98.9	2
99.0- 99.5	3
99.6- 99.9	2
100.0-100.5	8
100.6-100.9	3
101.0-101.5	4
101.6-101.9	1
102.0- +	2

Period Without Oral Intake. Eight of the patients in this series were taking oral feeding within 5 days. The period without oral nourishment was 6 to 10 days in 7 cases and 11 to 15 days in a similar number of cases. The longest period was 22 days, the shortest was 2 days and the average duration was 8.6 days.

Duration of Intravenous Therapy. Parenteral solutions were utilized for 2 to 5 days in 10 cases while 7 cases were given drips for 6 to 10 days. In 5 cases the period was 11 to 15 days. The longest period of parenteral therapy was 22 days, the shortest 2 days and the average 8.5 days.

Nasogastric Suction. The Levin tube was used in 21 cases while the Miller-Abbott tube was used in 14 cases. Both tubes were used in 10 cases. Nasogastric suction was employed for 2 to 5 days in 9 cases and 6 to 10 days in 10 cases. In 6 cases the tubes were used for 11 to 23 days. The longest period of nasogastric suction was 23 days, the shortest was 2 days and the average was 8 days (Table 10).

Mortality. Of the 25 cases reviewed in this study, only 1 case failed to survive. This was a patient who apparently sustained a ruptured appendix during labor and was admitted to this

TABLE 10

DURATION OF NASOGASTRIC SUCTION

Days	*No. Cases*
2-5	9
6-10	10
11-15	3
16-20	2
21-23	1

hospital one week later. Extensive, generalized peritonitis was observed at the time of laparotomy. The clinical picture, up to the time of death, was characteristic of overwhelming endotoxin shock. In none of the cases which comprise this series was reoperation necessary in order to relieve intestinal obstruction.

DISCUSSION

Inflammatory intestinal obstruction appears to be confined to no specific age group nor is there evidence of predilection for either sex. Ruptured appendix continues to account for the great majority of these cases and this was true for all age groups. In many instances the clinical picture preoperatively was apparently influenced by antibiotic administration prior to hospitalization. These agents minimized systemic and local manifestation of intra-abdominal inflammatory changes with subsequent localization of pus so that limited segments of the small bowel were kinked and obstructed. In contrast to late adhesive small bowel obstruction, the majority of cases in this series revealed no history of prior surgery. The wide range and lack of localization of preoperative temperature readings at any specific level renders this sign virtually useless in arriving at the diagnosis.

In the great majority of cases, the white blood cell count was less than 20,000 with more than half falling between 10 and 20,000. This laboratory evaluation could conceivably be of aid in the preoperative establishment of the diagnosis. Preoperative radiologic studies, without the use of contrast media, appear to be of great value in establishing the diagnosis of obstruction since air-fluid levels and dilated small bowel were observed in 92 per cent of cases. These findings, of course, are of limited value in establishing the nature of the obstruction mechanism. The preoperative finding of audible peristalsis affords evidence against general peritonitis but is of little value in the differential diagnosis of obstruction.

Appendectomy was carried out in 13 of the 16 cases where appendicitis was the etiologic agent. At the time of laparotomy, for inflammatory obstruction, the decision for or against dissection and lysis of adhesions which form a part of the inflammatory mass must be made. A decision against this maneuver may be founded upon the contention that the resulting spread of infectious material would constitute an undesirable challenge to the patient's defense mechanism. Furthermore, immediate readherence of the raw surface might occur in certain instances. On the other hand, the desirability of drainage of localized collections of pus which occur during dissection of the inflammatory mass, would entail support from many authorities. More direct exposure of organism to antibiotics would also result from lysis of these adhesions. It is our considered opinion that the duration of the period of postoperative obstruction is shortened by operative freeing of inflammatory adhesions and this was carried out in 64 per cent of the cases which comprise this series.

The desirability of postoperative abdominal drainage by use of a soft rubber tube depends, for the most part, upon the presence or absence of localized collections of pus. It must be admitted that the general peritoneal cavity cannot be effectively drained, whereas localized collections will escape along the path of a soft rubber tube. A decision for or against operative decompression of dilated small bowel must be considered during the management of these patients.

Enterostomy entails risk of peritoneal contamination with highly toxic intraluminal material as well as the possibility of a postoperative bowel fistula. It has also been suggested that the period of decreased intraluminal pressure is short lived because of the early migration of new fluid volume into the bowel lumen. Advantages which result from operative decompression include easier and more effective closure of the abdominal wound, improved circulation to the bowel wall and earlier postoperative resumption of effective peristalsis. Prevention of postoperative wound infections proved to be a major problem in the management of cases herein reported. Wound contamination is virtually unpreventable. The practice of delayed wound closure may merit consideration in an effort to decrease this troublesome complication. It is probable that the generous use of antibiotics was responsible, more than any other single factor, for the relatively low (4 per cent) mortality rate observed in this series.

Experimental studies have indicated the effectiveness of penicillin, Streptomycin, and Chloromycetin in the management of peritoneal contamination and this combination was most frequently used. It was necessary to use both long and short nasogastric tubes in 10 cases because of accumulation of gas and fluid in the stomach after passage of long tubes into the lower reaches of the small bowel. Normal alimentary tract function was established in 9 days for an average in this series. Reoperation was not necessary in any

of the 25 cases, although, 1 case was followed for 22 days.

SUMMARY

This report includes an analysis of 25 cases of mechanical small bowel obstruction resulting from localized peritonitis. The condition showed no age or sex predilection. It most commonly resulted from appendiceal perforation and the white blood cell count was usually below 20,000. Radiologic examination, without the use of contrast media, was helpful in 23 of the 25 cases. Audible preoperative peristalsis was detected in 22 of the cases. All cases were operated upon and lysis of the inflammatory adhesions was effected in 64 per cent. Operative small bowel decompression was utilized in slightly less than one-third of cases. Wound infection proved to be the most common postoperative complication. The duration and types of antibiotic therapy are described. An analysis of the period without oral intake, of nasogastric suction and of parenteral alimentation, is recorded. In no instances was it necessary to reoperate for obstruction and 1 of the cases failed to survive. ★★★

2500 North State St.

Supported by NIH Grant No. AM-04644-03

COUTURIER CREATION

A prominent ladies dress manufacturer was conducting his summer showing of his new collection which was being attended by 40 important buyers. As the lunch hour approached, he called an assistant and sent him to the city's best restaurant with these instructions:

"Bring back one sandwich, but make sure it's the most expensive one they make."

"How in the world can you feed 40 people with one sandwich?" asked the confused assistant.

"Don't tell me how to run this business," retorted the manufacturer. "After you buy that sandwich, take it over to Sam's delicatessen and have him knock off 39 copies."

Incidence of Poisonous Snakebites In Mississippi

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Every year an estimated 236 persons are bitten by poisonous snakes in Mississippi. The author describes the species and subspecies indigenous to the state and discusses current treatment. He presents a survey of Mississippi hospitals and physicians on the incidence of snakebites by age, time of year and time of day, place, and anatomical site.

Poisonous snakebite accidents occur frequently in the East South Central Region (Kentucky, Tennessee, Alabama, and Mississippi) of the United States. From epidemiological research in progress, we have estimated that 79 people per year are treated for poisonous snakebites in Tennessee, 143 per year in Kentucky, and 208 per year in Alabama. Epidemiology can be used to study noninfectious diseases (for example, snakebites) as well as infectious diseases. The purpose of this study is to determine the incidence of poisonous snakebites in Mississippi, to describe other epidemiological characteristics of snakebites, to relate some medical findings associated with these bites, and to review briefly current concepts of snakebite treatment.

POISONOUS SNAKES

According to Conant,[1] the following species and sub-species of poisonous snakes are indigenous to Mississippi: the eastern diamondback rattlesnake *(Crotalus adamanteus),* the canebrake rattlesnake *(Crotalus horridus atricaudatus),* the dusky pigmy rattlesnake *(Sistrurus miliarius barbouri),* the Carolina pigmy rattlesnake *(Sistrurus miliarius miliarius),* the western pigmy rattlesnake *(Sistrurus miliarius streckeri),* the eastern cottonmouth moccasin *(Agkistrodon piscivorus piscivorus),* the western cottonmouth moccasin *(Agkistrodon piscivorus leucostoma),* the southern copperhead *(Agkistrodon contortrix contortrix),* and the eastern coral snake *(Micrurus fulvius fulvius).* Thus, there are nine species and sub-species of venomous snakes in Mississippi.

From the Department of Community Health and Medical Practice, University of Missouri School of Medicine.

Mississippi has each of the four major kinds of venomous snakes found in the United States. With the exception of the coral snake, they are all pit vipers. They are so named because of a characteristic pit which is located between the eye and nostril on each side of the body. Pit vipers also are identified by elliptical pupils and by two well-developed fangs which protrude from the maxillae when the snake's mouth is opened. Rattlesnakes have rattles which are attached to their tails. Copperheads, cottonmouth moccasins, and harmless snakes do not have rattles. The copperhead has a reddish-brown head and dark, hourglass-shaped crossbands on the body. Harmless snakes do not have facial pits, they have round rather than elliptical pupils, and while they have teeth, they lack fangs.

The coral snake is a beautifully colored small snake which has broad rings of scarlet and black separated by narrow rings of yellow. An easy way to remember this is, "Red next to yellow will kill a fellow." It is important to remember that the coral snake's snout is always black. Several harmless snakes resemble coral snakes but their snouts are usually grey or red. Coral snakes have round

pupils and they lack facial pits. See Figure 1 for photographs of poisonous snakes of Mississippi.

METHODS OF STUDY

A questionnaire and letter explaining the purpose of this study were mailed to a "selected" group of Mississippi hospitals listed in the *Journal of the American Hospital Association* Hospital Guide Issue. The hospitals selected for this study were general hospitals, children's hospitals, and college infirmaries. Army, Navy, Coast Guard, Public Health Service, Air Force, and Veterans Administration hospitals also were sent questionnaires. Maternity, tuberculosis, and mental hospitals were omitted as they would not be expected to treat snakebite victims. A total of 99 Mississippi hospitals comprised the study group. Each hospital was requested to report all in-patients admitted to the hospital for snakebite treatment during 1958 and 1959.

Most hospitals do not code and tabulate the diagnoses of emergency room and out-patient clinic visits. Since some snakebite victims are not admitted to the hospital as in-patients, it seemed essential to ask a sample of practicing physicians how many snakebite victims they treated on both an out-patient (office, home, emergency room) and on an in-patient basic. Previous surveys[2, 3] have shown that most people with venomous snakebites are treated by general practitioners, surgeons, internists, pediatricians, and orthopedic surgeons. Therefore, a random sample of one-third of all the Mississippi physicians in these categories of practice who were listed in the AMA American Medical Directory were sent questionnaires.

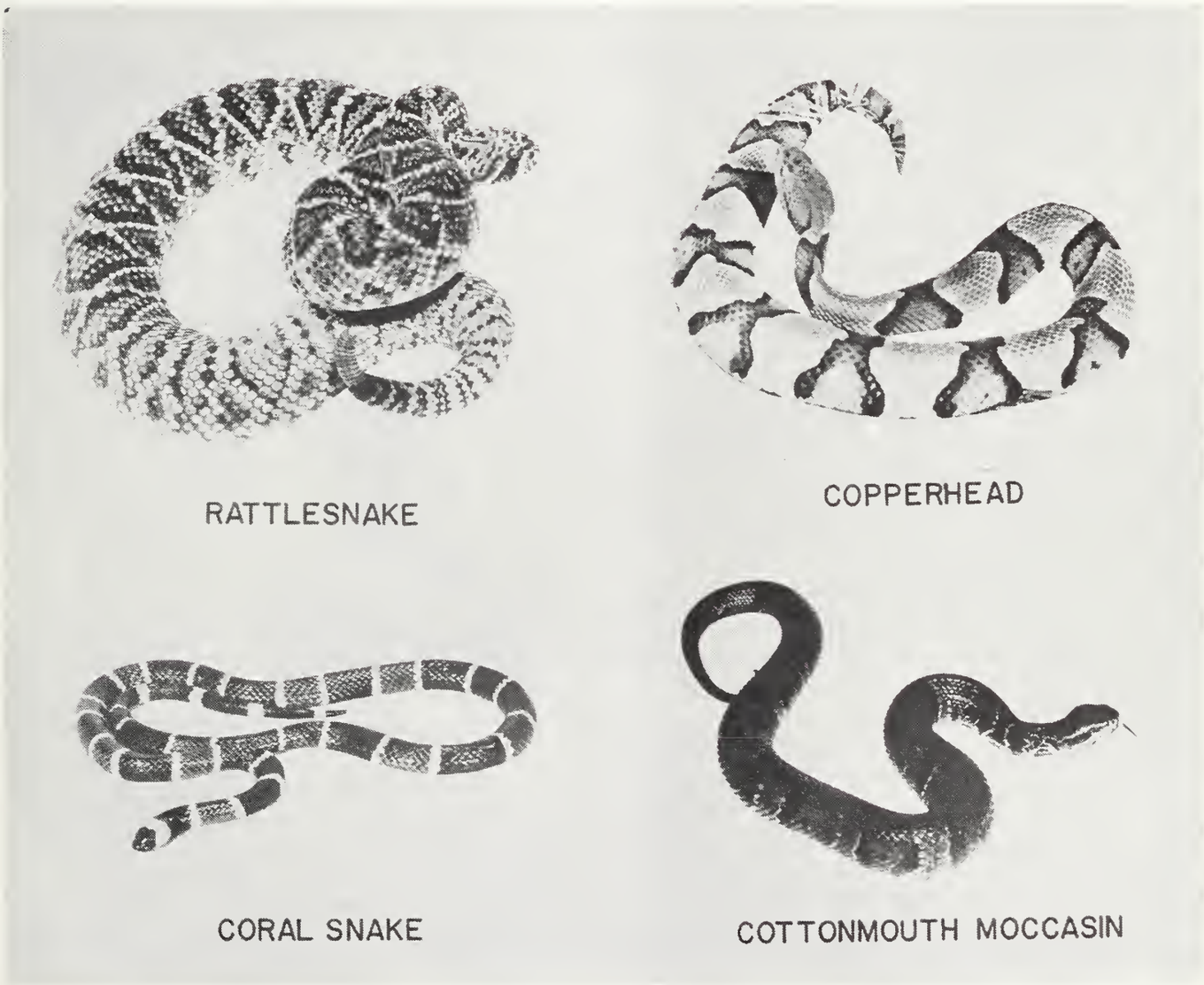

Figure 1.

Death certificates for fatal snakebite cases were obtained from the Mississippi State Board of Health.

RESULTS

This report is based on questionnaires returned by 87 (88 per cent) of 99 Mississippi hospitals. It is supplemented by questionnaires returned by 182 (72 per cent) of 256 practicing physicians in the State and by one death certificate provided by the Mississippi State Board of Health.

INCIDENCE

Mississippi hospitals reported a total of 102 in-patients treated for poisonous snakebites during 1958 and 1959. There were 42 cases in 1958 and 60 cases in 1959—an average of 51 cases per year. Of the 102 snakebites reported during 1958 and 1959, case reports were received for 97 patients and only numbers of bites were reported for 5 cases. All of the analyses in this paper, excluding the estimate of incidence, were based on the 97 case reports received from hospitals.

Physicians' reports, when adjusted to account for all Mississippi physicians in the practice categories mentioned, indicated that approximately 113 in-patients and 123 out-patients were treated for snakebite accidents each year. This difference between the number of in-patients treated by hospitals and the estimated number of in-patients treated by physicians can be explained, in part, by the following facts: (1) Twelve (12 per cent) of the Mississippi hospitals did not participate in the study; (2) Fifteen counties from which physicians reported snakebites did not have hospitals listed in the Hospitals Guide Issue; and (3) There was evidence of under reporting snakebite in-patients from seven hospitals which participated in the study.

Physicians in the 15 less populated counties not having a hospital listed in the Hospitals Guide Issue reported that they treated 23 in-patients and 36 out-patients for snakebites in small clinics, hospitals, and infirmaries.

Physicians in counties from which hospital snakebite cases were received estimated that 79 in-patients and 70 out-patients were treated per year. This estimate of 79 in-patients is higher than the average of 51 in-patients reported by the hospitals in these counties. However, there was evidence of under reporting of at least 11 in-patients from seven hospitals in these counties.

Taking all of these various reports into consideration, we estimate that about 236 people (113 in-patients and 123 out-patients) are treated for poisonous snakebites every year in Mississippi, an incidence of 10.83 bites per 100,000 population per year.

GEOPATHOLOGY

The geographical distribution of snakebites reported in Mississippi during 1958 and 1959 may be seen in Figure 2. The lightly shaded counties are those from which hospitals reported in-patients treated for snakebites. An appropriate symbol is used to mark each hospitalized patient who was bitten by a specific kind of snake. The darker shaded counties are those counties from which physicians reported snakebite cases, but from which no cases were reported by hospitals.

Of 97 people hospitalized for snakebite treatment, 20 (21 per cent) were bitten by cottonmouth moccasins, 16 (17 per cent) by rattlesnakes, 10 (10 per cent) by pigmy rattlesnakes, 11 (11 per cent) by copperheads, and 40 (41 per

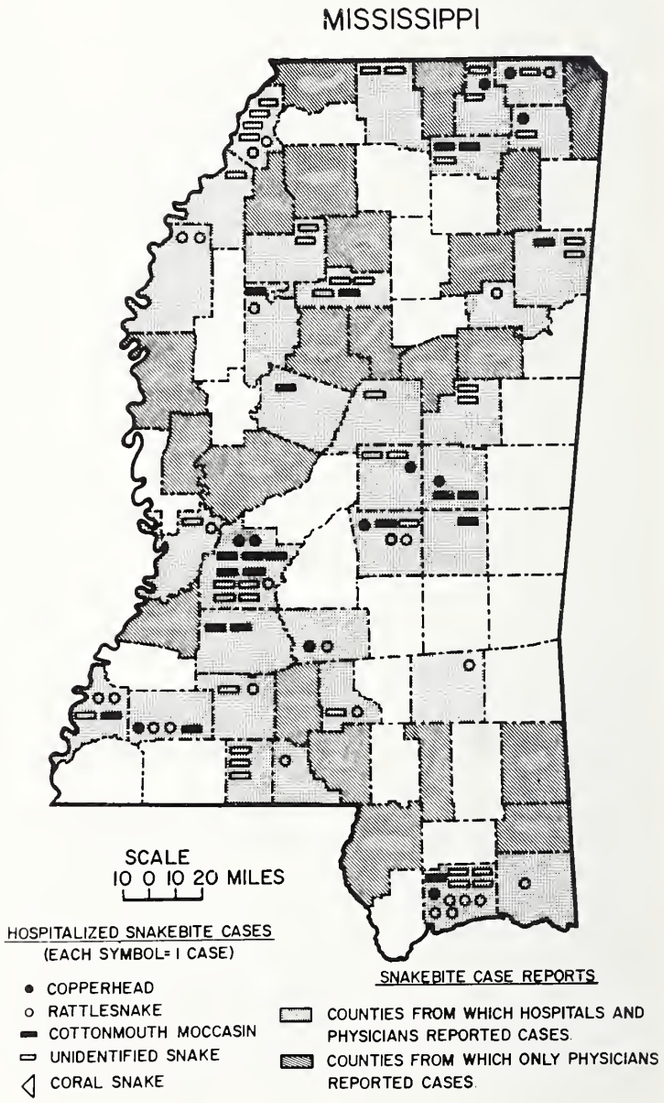

Figure 2.

cent) by unidentified poisonous snakes. There were no coral snakebites reported. While cottonmouth moccasin bites were reported from all parts of Mississippi, most of them were reported from the southern one-half of the State. Only one of these bites occurred in the narrow range for the eastern cottonmouth; therefore, it seems likely that most of these bites were inflicted by the western cottonmouth moccasin. This same pattern was found for rattlesnake (pigmy rattlesnakes plus other rattlesnake species) bites. Most of the rattlesnake bites were reported from the southern part of the State. Copperhead bites occurred sporadically throughout Mississippi. This is in keeping with their statewide distribution. Figure 2 shows that a high percentage of the bites by unidentified snakes happened in counties reporting cottonmouth moccasin and rattlesnake bites. It seems likely that many of these bites were inflicted by rattlesnakes, pigmy rattlesnakes, and cottonmouth moccasins.

Figure 2 shows five multi-county foci of poisonous snakebites in Mississippi. These are: (1) the Alcorn, Tippah, Prentiss, Marshall, Union County area in northeastern Mississippi, (2) the Tunica, Coahoma, Bolivar, Tallahatchie, Grenada, Le Flore County area in northwestern Mississippi, (3) the Attala, Leake, Scott, Newton, Neshoba, Winston County area in central Mississippi, (4) the Warren, Hinds, Copiah, Simpson, Adams, Franklin, Lincoln, Pike County area in southwestern Mississippi, and (5) the Harrison, Jackson County area in southeastern Mississippi. These well defined multi-county snakebite areas are surrounded by counties from which physicians reported additional snakebite cases but from which no reports of snakebites were received from hospitals.

TEMPORAL RELATIONSHIPS

The monthly distribution of snakebite accidents is shown in Table 1. Snakebites were infrequent during the colder months of the year—December, January, February and March. In general, snakes are usually inactive and/or hibernating during the colder months. One of the two bites that were reported for these months happened when the victim deliberately picked up a pigmy rattlesnake. Poisonous snakebites began to increase in April when nine bites were reported. Most of the snakebites in Mississippi occurred from April through October when 90 (93 per cent) of the 97 bites were inflicted. This striking seasonal distribution of bites coincides with the time that snakes are most abundant and active and with the time that people have greater exposure due to out-of-doors occupations and recreation. Similar "seasonal epidemics" of venomous snakebites have been observed in New England and Florida.[2, 3]

With three exceptions, all of the bite accidents were rather evenly distributed throughout the day from 6:00 a.m.-8:59 p.m. Two bites happened about 5:30 a.m. and one bite occurred at 9:30 p.m. The number of bites by three hour periods of time were: 6:00-8:59 a.m., 14 bites; 9:00-11:59 a.m., 21 bites; 12:00 noon-2:59 p.m., 18 bites; 3:00-5:59 p.m., 18 bites; 6:00-8:59 p.m., 16 bites; 9:00-11:59 p.m., 1 bite; 12:00 midnight-2:59 a.m., no bites; and 3:00-5:59 a.m., 2 bites. In seven cases the time of the bite accident was not stated.

TABLE 1

SEASONAL DISTRIBUTION OF VENOMOUS SNAKEBITES IN MISSISSIPPI, 1958 AND 1959

Month	*No. Bites*	*Month*	*No. Bites*
January	1	July	17
February	1	August	12
March	0	September	18
April	9	October	9
May	13	November	5
June	12	December	0

BITE VICTIMS

There were 45 white males, 26 white females, 18 non-white males, and 8 non-white females admitted to Mississippi hospitals for snakebite treatment during 1958 and 1959. All of the non-whites were Negroes, except for two American Indian males. Using the 1960 census of the population of Mississippi, the bite rates per 100,000 population were: 7.20 for white males, 4.06 for non-white males, 4.11 for white females and 1.79 for non-white females. Thus, whites had higher snakebite rates than non-whites and males had higher rates than females.

The age distribution of Mississippi snakebite victims is shown in Table 2. The largest number of bites happened to children 0-9 years of age, 32 bites, and to those 10-19 years of age, 23 bites. Indeed, 57 per cent of all snakebites were inflicted on children and young adults less than 20 years of age. Age-specific bite rates are much more meaningful since they take into account the population at risk in a particular age group. The highest biannual bite rates per 100,000 population were: 0-9 years of age—5.93; 10-19 years of age

—5.23; and 40-49 years of age—4.24. The lowest rate was in the 70 year and over age group.

An analysis of the occupations of the patients showed that 55 were children, 14 were housewives, 14 were farmers or farm laborers, 6 were laborers other than farm laborers, 2 were unemployed, 1 was a private household worker, and 1 was a sales worker. The occupation was not coded for the remaining bite victims.

TABLE 2

AGE DISTRIBUTION OF HOSPITALIZED SNAKEBITE VICTIMS IN MISSISSIPPI 1958 AND 1959

Age Group (Years)	*Population at Risk**	*No. Bites*	*Rate per 100,000***
0- 9	539,304	32	5.93
10-19	440,140	23	5.23
20-29	249,114	9	3.61
30-39	242,395	9	3.71
40-49	235,806	10	4.24
50-59	208,293	5	2.40
60-69	147,100	4	2.72
70 or more	115,989	0	0.00
Not stated	—	5	—

* Based on the 1960 Census of the Population of Mississippi.

** These rates are based only on hospitalized patients for whom information was available.

ACTIVITY AND PLACE

Twenty-one bites happened while children were playing outside, 9 in their own yards and 12 elsewhere. Thirteen other people were bitten while working or walking in their yards. Eleven people were bitten while working on a farm or ranch, seven while fishing, three while swimming, and three while hunting. Five were bitten while handling a poisonous snake, two while picking up logs or lumber and two while walking near a highway. The activity when bitten was not coded for the remaining patients.

The place where the bite accident happened is closely related to the activity when bitten. The largest number of snakebites, 24, happened right in the patient's own yard. Eleven people were bitten on a farm away from the house, ten were in or near the water, six in the woods, four in or under a house or building, four in a field away from the house, two in a field near the house, and two near a highway. The place where the bite happened was not recorded for the remaining patients.

SITE AND SEVERITY

The anatomical sites on human beings where venomous snakes inflicted their bites are shown in Table 3. Ninety-three (96 per cent) of the bites were on the extremities, 31 (32 per cent) on the upper extremities and 62 (64 per cent) on the lower extremities. The fingers and hands were the parts most often bitten on the upper extremities. The feet and lower legs, including the ankles, were the parts most frequently bitten on the lower extremities. One man was bitten on the forehead while peering at a snake that he had run over with his automobile. One child was bitten on the back by a snake, and another child was bitten on the right buttock.

TABLE 3

ANATOMICAL SITES OF BITES INFLICTED BY VENOMOUS SNAKES IN MISSISSIPPI 1958 AND 1959

Anatomical Site of Bite	*Side of Body* RIGHT	LEFT	*Total No. of Bites*
Head, face & neck	1	0	1
Trunk, front	0	0	0
Trunk, back	2	0	2
Upper arm	0	0	0
Forearm	1	0	1
Hand	4	3	7
Fingers	14	9	23
Upper leg	1	2	3
Lower leg & ankle	7	11	18
Foot	21	16	37
Toes	4	0	4
Not stated	—	—	1

A modification of the clinical classification of pit viper venenations by Wood, Hoback and Green[4] was used to determine the severity of bites. Bites were classified as follows:

Grade 0—*No venenation.* Fang or tooth marks, minimal pain, less than 1 inch of surrounding edema and erythema. No systemic involvement.

Grade I—*Minimal venenation.* Fang or tooth marks, severe pain, 1-5 inches of surrounding edema and erythema in first 12 hours after bite. No systemic involvement usually present.

Grade II—*Moderate venenation.* Fang or tooth marks, severe pain, 6-12 inches of surrounding edema and erythema in first 12 hours after bite,

systemic involvement may be present—nausea, vomiting, giddiness, shock or neurotoxic symptoms.

Grade III—*Severe venenation.* Fang or tooth marks, severe pain, more than 12 inches of surrounding edema and erythema in first 12 hours after bite, systemic involvement usually present as in Grade II.

The severity of venenation (venom poisoning) was classified for 71 of the 97 hospitalized snakebite cases in Mississippi. Of these 71 bites, 21 (30 per cent) were Grade 0, 32 (45 per cent) were Grade I, 11 (15 per cent) were Grade II, and 7 (10 per cent) were Grade III. There was one death among the 97 cases in this series, providing a case-fatality rate of one per cent. When one realizes, however, that about 50 per cent of all poisonous snakebite cases in Mississippi are managed on an out-patient basis, the case-fatality rate probably is about 0.5 per cent. This is confirmed by the fact that there were only three snakebite deaths in Mississippi during the ten year period, 1950-1959.[5] These findings tend to indicate that snakebite treatment in Mississippi is effective and/or that poisonous snakes in Mississippi are not as lethal as formerly believed. We feel that both of these factors are operating in Mississippi to produce a low case-fatality rate.

In Mississippi only 15 per cent of the venenations were Grade II and 10 per cent were Grade III. This finding is rather difficult to explain in view of the fact that cottonmouth moccasins inflicted 21 per cent, rattlesnakes 17 per cent, and pigmy rattlesnakes 10 per cent of the bites. In general, large rattlesnakes *(Crotalus sp.)* and cottonmouth moccasins cause more severe venenations than do pigmy rattlesnakes *(Sistrurus sp.)* and copperheads. Perhaps a high percentage of the rattlesnake bites were inflicted by pigmy rattlesnakes.

TREATMENT

The current treatment of North American pit viper (rattlesnake, cottonmouth moccasin, and copperhead) bites includes both minor surgery and medical forms of treatment. A constricting band (tourniquet) should be applied lightly to the involved extremity several inches proximal to the bite. The constricting band should be applied only tight enough to occlude the superficial venous and lymphatic flow. It should not occlude the arterial circulation, and it should be released every 10-15 minutes for a minute or two. As edema resulting from venom poisoning spreads, the constricting band should be advanced to keep just ahead of the swelling. The purpose of the constricting band is to impede the spread of venom until incision and suction can be used to remove the venom mechanically and/or until antivenin can be administered to neutralize the venom.

Incision and suction (I.S.) is effective in removing venom from experimental animals up to about 120 minutes after the venom is injected. The sooner it is used, the larger the amount of venom that can be removed. Suction should be used for about one hour. We have found the suction cups supplied in the Cutter and the Becton-Dickinson snakebite first-aid kits effective for removing pit viper venom. Incisions, one-quarter inch long and one-eighth to one-quarter inch deep, are made into the subcutaneous tissues over the fang punctures. A few (3-5) additional incisions may be made in the surrounding edematous tissues. A large number of incisions is not needed. Immobilization aids in limiting the spread of venom. However, if one must decide between immobilization and seeking prompt medical treatment, the latter should be sought.

The "3 A's" (antivenin, antibiotics, and tetanus antitoxin and/or toxoid) are recommended, in addition to I.S., in treating all serious pit viper bites. Antivenin Crotalidae Polyvalent (Wyeth) is effective in neutralizing the venoms of all North American pit vipers. It is not protective against coral snake venom. Since antivenin is manufactured from horse serum, the patient should receive a skin test before antivenin is given. For Grade I venenations antivenin may be administered in the deltoid or gluteus muscles. In Grade II and Grade III venenations, antivenin diluted in 1000 cc. of normal saline may be given intravenously.[6] Studies with radioisotopes have shown that antivenin accumulates at the site of the bite more rapidly after intravenous administration than after intramuscular administration.[7] Injection of antivenin into the local bite area is not a particularly effective way to administer antivenin. We have found the following amounts of antivenin useful in treating the various grades of venenation: Grade 0 (no venenation) requires no antivenin; Grade I (minimal venenation) may require 10 cc. (one ampoule) of antivenin; Grade II (moderate venenation) requires 30-40 cc. of antivenin; and Grade III (severe venenation) requires 50 cc. or more of antivenin.

Since snakes' mouths and venoms may harbor pathogenic organisms, antibiotics and tetanus antitoxin and/or toxoid should be given prophylactically. Gram negative organisms predominate, hence a broad spectrum antibiotic is indicated. Penicillin used by itself is not adequate treatment.

Cortisone and ACTH do not affect the survival rate of animals poisoned with pit viper venom.

They probably should not be used during the first few days after venenation, although they may be beneficial later in treating serum sickness resulting from antivenin therapy. Antihistamines are contraindicated as they shorten the survival time of animals poisoned with pit viper venoms. Shock resulting from venom poisoning should be treated with infusions of blood, plasma, saline solution and vasopressor drugs. Meperidine hydrochloride and other analgesics may be given to relieve pain. Recently there have been reports of excessive tissue necrosis and amputations associated with cold therapy such as packing an extremity in ice or using ethyl chloride.[7] In our opinion, cold therapy should not be used in treating pit viper bites.

SUMMARY

An estimated 236 people are treated for bites by poisonous snakes every year in Mississippi. Of these, 113 (48 per cent) are admitted to hospitals for treatment and 123 (52 per cent) are treated on an out-patient basis in hospital emergency rooms and in physicians' offices.

Of 97 in-patients reported by Mississippi hospitals during 1958 and 1959, 20 (21 per cent) were bitten by cottonmouth moccasins, 16 (17 per cent) by rattlesnakes, 10 (10 per cent) by pigmy rattlesnakes, 11 (11 per cent) by copperheads, and 40 (41 per cent) by unidentified poisonous snakes. A seasonal "epidemic" of snakebites occurred in Mississippi with 90 of the 97 cases reported from April through October. With three exceptions, the bite accidents were rather evenly distributed throughout the day from 6:00 a.m.-8:59 p.m.

Males had higher bite rates than females and white people had higher rates than non-whites. The occupational groups most frequently bitten were children—55 bites, housewives—14 bites, and farmers—14 bites. Ninety-six per cent of the bites were inflicted on the victims' extremities—32 per cent on the upper extremities and 64 per cent on the lower extremities. There was only one death among the 97 hospitalized snakebite victims, a case fatality rate of one per cent. The case-fatality rate for all snakebite cases (hospitalized plus non-hospitalized) was about 0.5 per cent. Current snakebite treatment is discussed. ★★★

The authors cite with gratitude the technical assistance of Genevieve Calescibetta, Judi Pummill, Maxine Bewley, and Mary Ann Preu.

This investigation was supported in part by Public Health Service Research Grant GM 11268-02 from the Division of General Medical Sciences, Public Health Service.

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MATRIMONIAL MORALITY

Marriage is that high and honorable estate that teaches a man frugality, temperance, punctuality, tact, forbearance, and many other splendid virtues he wouldn't need if he had stayed single.

The College Student Health Service: A General Practice Institution

JOHN C. LONGEST, M.D.
State College, Mississippi

HEBIATRICS IS THE FIELD of medicine concerned with young people. This is the primary interest of the director of the Student Health Service at Mississippi State University, although the responsibilities and experiences of a physician in a college community oftentimes go far beyond the point of dealing solely with young people.

The quality of medicine being practiced today in American colleges and universities is of a standard second to no other field of medicine. There are, of course, variations of quality, and it is recommended to students selecting a college that a brief survey of health facilities in an institution provides a good index to the quality of the school. An authoritative source says in a general statement about health services in college: "No college should attempt to operate a health service unless it can provide a quality of medical service equal to or better than that available in the area. As an educational device in furthering and in demonstrating good medical care, the college health service should be satisfied only with better than average service. The bulk of medical care in the college health service can be provided by the general practitioner with specialists available for unusual cases."[1]

The student health service is truly a general practice institution. The history of medicine is filled with examples of the interdependence of men. The spirit of sharing knowledge is one of these shining examples of greatness of medicine. In student health work, with proper consultation, the fine young people of a school can be shown by demonstration and education good health practices which will be useful the remainder of their lives.

Read before the Section on General Practice, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

It has been said, "The benefits of a good college health service are more easily experienced than explained."[1] Herein follows briefly the basic concepts of student health service as practiced at Mississippi State University along with some different methods used with success in other colleges. There are five basic sections to a student health service in a large college.

"The student health service is truly a general practice institution," writes the author. He discusses the organization, activities, and financing of college health services in general and describes the service at Mississippi State University in particular.

OUTPATIENT CLINIC

The outpatient clinic is the most important of all because this is where the greatest number of patients are treated. Attending classes is the students' primary purpose at college, and everything practicable is done to accomplish this end. The most important person in a student health service is the clinic nurse. This position is the backbone of the entire service. This is the nurse who meets every patient and whose function is as follows: (a) direct consultation with the patient, (b) interpretation wherein she actually appraises the patient's needs and treats him if such treatment is within the realm of her ability and well-controlled armamentarium of medications, (c) assignment of the patient to another service such as the doctor, laboratory, physiotherapy or x-ray.

She may dispense a fairly wide variety of simple drugs for various ailments and thereby provide all the care needed for the patient on a par-

ticular visit. At the same time she carefully screens all patients and arranges a consultation with the doctor when indicated and carries out his orders for treatment. She is responsible for daily rechecking patients as they return for follow-up examinations. (Requiring students to return for daily rechecks during treatment is a valuable safeguard against serious illness inadvertently slipping past.)

The position of clinic nurse requires a mature person of experience, intelligence and dedication to her career, but it requires additional on-the-job training because this work is different from hospital or office nursing. She should be a permanent employee. Once this person is well oriented in the various routines set forth by the doctor, and always under his supervision, she can supply the needs of many without direct consultation of the patient with the doctor. This also takes care of many of the trivial ailments which have caused a number of doctors to be unhappy in student health clinics when there are plenty of other interesting and complicated cases which require the doctor's time and provide him with the adequate stimulation to maintain first class diagnostic and treatment acumen.

At Mississippi State University there are one to four clinic nurses on duty from 7 a.m. until 6 p.m. which is unusually long coverage. Beds are provided for day care so that patients confined for a few hours may return to their rooms if their response is satisfactory or be admitted to the hospital if it seems necessary.

SCHOOL INFIRMARY

The school hospital or infirmary is not very different from a general hospital so far as staffing and general principles are concerned. Records can vary from very simple ones for the acute short term illnesses to conventional hospital records for more serious illnesses. It is desirable that the hospitals abide by general rules for accreditation whenever possible, and many college hospitals are accredited by the Joint Commission on Hospital Care. The Mississippi State University Hospital is not accredited, but it is licensed.

LABORATORY AND X-RAY

Clinical laboratory and x-ray are usually operated as a unit. The laboratory should be complete —providing chemistries and bacteriological facilities in addition to the usual blood, urine, and routine studies. This, along with contract services to provide tests such as PBI determinations, 17 ketosteroids, and others beyond the scope of the ordinary lab, EKG interpretations by a cardiologist, and x-ray interpretations by a radiologist, can provide college health a very excellent clinical laboratory service. At MSU the Animal Husbandry Department even provides sheep blood for heterophils. Nominal charges are made for x-rays, but other services are included in the student fee except those requiring a charge for outside work or a consultant for interpretation.

DISPENSARY

A dispensary or pharmacy to provide drugs at a reasonable cost can be dispensed by the clinic nurse in most instances, but a pharmacist is desirable in larger institutions. A minimal markup on drugs is charged at Mississippi State University, thereby recovering some of the money, but more important, teaching the student to respect the fact that this product has monetary value.

Physiotherapy and physical medicine is a big part in any student clinic and should be well provided with adequate space, equipment, and personnel.

FINANCING

Financing of the health service can be accomplished in several ways. At MSU a health fee is paid by each student, and minor charges are made for special services. A fee of this type is the major source of support in most college health services and should be designated as such so that students realize that they are paying for the service that is a sound prepayment plan. Additional charges are made for drugs, x-rays, unusual lab procedures, and for meals during hospitalization. All fees are on a minimal basis slightly above cost. The rationale of the extra charges is based on the principle of distributing costs equitably and to discourage abuse by wastes, but primarily to educate students to expect reasonable cost for drug products and special services. This helps to maintain an essential aspect of our American way of life. The fee at Mississippi State University is $7.50 per semester. It was $5.00 prior to the 1962-63 session. The Service has not operated at a deficit any year since 1948.

Some schools have a budget appropriations from general university funds. This type of financing may create the problem of competition from other departments. It also does not conform with the concept that a specific fee should be labeled and paid for a specific service. Often times this fee is lost in the shuffle, and the student is not aware that he is paying for the health services.

Other schools have a health fee supplemented by funds from general budget or other sources. This type applies when the health service does formal health education teaching, research, or provides some other unusual service for which the student fee should not be used. Most schools, however, offer voluntary or compulsory health insurance. This is a good plan to supplement the other three types of financing. A school-sponsored plan paid for by the student provides excellent coverage at a very reasonable cost and usually comes at a time when people reach the age where they are no longer covered by the family's plan.

Before leaving the area of financing, it should be stressed that money collected from health fees should be used only for health protection for the student. This money should not be used for health education, research, campus sanitation, or medical services for athletic injuries sustained in intercollegiate sports.

GENERAL CONSIDERATIONS

There are many other items of importance which should be mentioned briefly. Naturally, a health service has geographical limitations; so it is necessary for a student to report to the hospital for treatment. House calls are made when necessary, but the student is charged for this service. There are many occasions to help the family physician with postoperative or convalescent care of patients.

Medical records have become important in recent years, and researchers have found this group to be an excellent area for investigation. Tuberculosis control, rheumatic fever, and infectious mononucleosis are areas in which college health doctors have excelled in research. Each year at MSU a mobile-unit x-ray is made on each student, and each semester an entrance examination on each new student is made using a good station to station type examination with the help of extra physicians representing general practice and appropriate specialties. Nine hundred to 1,200 students are processed in two days, including urinalysis and a flu shot.

Some schools require a pre-entrance examination and others simply a health history survey by the student. Every student at MSU has a health record, although some do attend school without their entrance examination. This will be corrected in the near future because the service is seeing more students with recurrent problems whose records do not show prior history of disease or treatment, and many of these recurrences would be detected earlier if their records were completed. Communications from home town physicians are very important to student health services, and in turn the student health services can be important to their patients when information is properly exchanged. Information about known mental illnesses, epilepsy, and allergies is especially of value. Medical records in a student health service must be kept in confidence just as any other such records, and release of this information must be done only with authorization of the patient.

Immunizations have not been stressed at MSU because response to an offer of mass immunization is poor, and no disease preventable by immunization is a serious threat to a college community. Certainly, this should be pursued with diligence from an educational standpoint, for some feel that medical men in general have become quite complacent in their effort for a high percentage of immunization. A few facts should be recognized.

Typhoid is no longer a serious disease because of improved sanitation, not immunization. Typhoid injections cause too much reaction for the amount of antibody response.[1] In addition, the typhoid organism has apparently lost some of its virulence, and a specific cure is available if it does occur. Diphtheria has become rare although it is a dangerous disease when it does occur. Eastern universities have felt the greatest need for diphtheria immunization while Southern and Western institutions have rarely experienced a need for protection in the college age group. Here again, antitoxin is available when the need arises. Polio protection has been more universally accepted by the American public in recent years than any other immunization, and students entering MSU are probably up to date on this more than any other disease.

Tetanus toxoid continues to be used more and more with the incident of wounds rather than tetanus antitoxin, since it has been proven that antitoxin is of little or no value except in the presence of active infection. For toxin neutralization the dose must be much larger than the generally used "preventive" dose of antitoxin.[2] At MSU nearly every one of the patients has had previous toxoid immunizations, and a stimulating booster gives protection immediately and eliminates the danger of antitoxin reaction which occurs in a large percentage of recipients in spite of sensitivity testing. Smallpox continues to be a dread disease with a high morbidity and mortality for which there is no cure. Efforts should be redoubled to maintain immunity in the masses in this instance. Influenza immunizations are encouraged as much as possi-

ble at MSU because experience reveals that students who take polyvalent influenzal vaccine just are not sick as often or as severely with respiratory illnesses as those who do not.

Mental health is an area about which so much is being said these days on all levels of society. My feeling is that too much publicity is being given to the need for specialized help. I would be the first to say that certainly we need psychiatric help for some of our students, but I abhor the thought that everyone should be screened, treated, or consulted by a psychiatrist, psychologist, or social worker when most needs can be cared for by the patiently listening G. P. or a faculty or religious counselor and plain old fashioned common sense.

I also abhor some of the modern educational practices, e.g. grading, which prohibit recording differences in peoples' abilities and which destroy a student's incentive to excel above his fellow student. I think that this is a socialistic method of reducing intelligence to a common denominator of oneness and actually will aggravate rather than help mental illness in America. I feel that mental and emotional problems frequently result in the student's inability to find his social and scholastic level, and his greatest adjustment must be to identify himself at a level commensurate with his ability. Certainly, I feel that academic counselling is important apart from emotional problems because it is the rare instance where we see a student on academic probation who has consulted his professors or his academic counselor in an effort to solve his problems before failure is certain. Academic difficulties arise frequently due to illness. There are several alternatives which help the student to reduce his load without penalty or impairment of health, and student health services should utilize them.

Control of diabetic students has been a great satisfaction to the health service at MSU. We prefer to maintain refrigeration for insulin and provide sterile injection material at the clinic where diabetics can come daily and have self-service or a nurse for injections. Some students maintain refrigeration in their rooms by special arrangement with the housing authorities, but we frequently find a student getting out of control with signs obvious to a nurse or doctor before the patient himself realizes anything is wrong. This is another example of the daily recheck during an illness being a real safeguard to the patient.

Athletic medicine is a difficult problem with which to deal. It is the moral responsibility of the student health service to care for varsity athletes. However, it should not be financially responsible for injuries. These students pay, or have paid for them, the same medical fee which other students pay, and they are certainly entitled to the same services provided by such a fee. However, this should not include what may be termed "service connected disabilities." A financial arrangement suitable to the health service is rare. Doctors are too often engulfed by the powerful athletic groups and accept their moral obligation to the athletes without the doctor or his department receiving remuneration commensurate with the service rendered.

At MSU a tremendous amount of work is done in the field house training room, on the practice fields, and on the side lines of athletic contests. The health service maintains complete authority and responsibility for the health of athletes. Athletic trainers do an amazing amount of good work and cooperate completely with the health service personnel in caring for these patients. Coaches are receptive to treatment methods and restrictions placed on athletes, but we are universally defeated in our efforts to secure reasonable pay for services rendered to intercollegiate sports.

At the same time there is great satisfaction derived from doing this job well. Athletics is an area which attracts many physicians to student medicine, but it is often the case that these men will ignore the needs of 4,800 students while administering to 100 or 150 athletes. There are health services which provide medical coverage for athletics including attendance of a doctor at all scrimmages, contests, and daily in the training room without additional pay for services rendered, but schools that provide this type of care operate their health services with a staffing policy of one physician for every 1,000 to 1,500 students.

A student health service deals with a vast complexity of student problems directly or indirectly connected with the field of medicine. Visual, hearing, and speech defects arise in many patients who have never had proper advice for correction. Dental defects are common but usually are simply the result of poor oral hygiene. Gum chewing should be looked upon with great disfavor, while the toothpick should be socially accepted because of its great value in dental care.

Metabolic diseases, acne and obesity, are problems which the patients often face realistically for the first time after entering college. Some of these

are because they have left the complacent security of the home environment which accepted the condition without comment, others because of social adjustments, and still others simply because they learn that something may be done about it.

Rheumatic fever prophylaxis and control has received a great deal of attention in recent years on student health work primarily because of a national survey in which we have participated for the past five years. This labels all known rheumatics when they enter as freshmen students, and appropriate prophylactic measures can be started or continued.

Convulsive seizures present a frequent problem usually from unsuspected disorders rather than known disorders. Old cases are usually easily corrected with changes in medications or dosage. New cases most frequently are idiopathic in origin, and nearly all of them occur during episodes of strain with holding the breath or hyperventilation. All new cases are advised to have neurological investigations.

Allergies are common, and pre-entrance diagnosis provides us with many patients who require allergy vaccines. These vaccines are kept in the clinic refrigerator and administered by clinic personnel. Health hazards exist in many areas where poisons, organic compounds, volatile solvents, and radioactive isotopes may be used, and they should be controlled at least by consultation of the department with the student health service.

Ulcer patients present a problem for proper diet. The university cafeteria cooperates by maintaining diet tables for specific diseases requiring dietary control, but most patients have adequate selection of food from the cafeteria line. There was an unusual experience with bleeding ulcers at MSU in the school years 1960-61. There were during this period 24 bleeding ulcers, 5 of which were hospitalized at one time. They ranged in ages from 18 to 27, and only one was previously diagnosed. This demonstrates an unusual incidence of this disease, and I am happy to say that we have had no similar experience since.

Foreign students present problems of communication, change in diet, climate, religious and cultural backgrounds which require much time compared to American students. They also present with unusual diseases indigenous to their home countries which are difficult to treat and with medications we cannot identify.

Handicapped students need special attention, and conveniences should be planned for them. They must, of course, be physically and mentally capable of the academic course and capable of self-care, or they must provide their individual attendants.

There are various less personal responsibilities of a student health service. At MSU, campus sanitation is such a responsibility, but we readily request the aid of the county health department for most of this function. In Mississippi, it is the policy of the State Health Department to leave other state agencies alone. However, upon request they will provide their service, and it is our feeling that we place ourselves in a much more secure position by having an outside organization do the inspections. We reciprocate by readily abiding by their recommendations. The health department does all food-handler certifications including student employees. Recently, their sanitary engineer did a complete survey of fraternity houses, including those off campus, and found several corrections to be made to eliminate health hazards.

Clinic personnel serve as consultants when requested by teachers of health education courses. At MSU we act in an advisory capacity to the president, deans of various schools, student affairs, academic and disciplinary councils, religious groups and pre-medical organizations. As for discipline, we feel we are a treatment center and try to steer clear of the disciplinary actions of the institution. We report to officials only conditions required by law and try to maintain a good personal and ethical relationship with the patients. At all times the various administrative people are kept informed of the general state of health of the campus population.

A sick student is usually quite receptive to health information. It is part of our treatment to make him aware of the various factors required to provide him with good personal care. It is our hope that such knowledge will enable him to follow good health practices the remainder of his life. We feel that in addition to caring for a student's day to day medical needs, it is our responsibility to help him acquire wisdom as well as knowledge. ★★★

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Radiologic Seminar XXVI: Normal Intracranial Calcifications

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THE PRESENCE OF INTRACRANIAL calcifications on routine films of the skull may be a cause of concern. It is hoped that the following presentation may be of aid in quickly distinguishing pathological calcifications from those which are accepted as being essentially normal.

PINEAL

Pineal body calcification occurs frequently in normal adults. It is rarely seen in the first decade of life; it is present in about 20 per cent of individuals in the second decade, and thereafter, it is much more common.[1] The pineal body is a midline structure and hence, when calcified, it is demonstrated in the midline on both antero-posterior and postero-anterior projections. Its location is above and slightly posterior to the sella turcica in the lateral view. It usually appears as a single, small, circular density but may sometimes be seen as an oval cluster of punctate, calcified areas. The visualized pineal may prove to be of considerable help in diagnosing intracranial pathology when it is displaced from its usual position. A variation of two to three millimeters from the midline is within normal range.[2] Significant displacement may occur away from an expanding lesion or toward the side of cerebral atrophy.

CHOROID PLEXUS

Calcified areas in the choroid plexus may attain diameters of more than one centimeter. These have been found in children as young as one year.[3] The deposits are usually bilateral and are nearly always found on the floor of the lateral ventricles, lying below and behind the pineal on lateral views and to each side of the midline on frontal projections. The shadow is typically fainter than the pineal shadow. Unilateral choroid calcification may be impossible to distinguish from a deep seated glioma.

INTERCLINOID AND PETROCLINOID LIGAMENTS

Lateral views of the skull sometime reveal linear calcifications which seem to bridge the space separating the anterior and posterior clinoids. This is the so-called interclinoid calcification or calcification of the diaphragma sellae. Another band of calcification can occasionally be seen extending from the petrous bone to the posterior clinoid process. These have no pathological significance and do not compress the pituitary gland or alter its function.

DURA MATER

Dural calcification is very common in the falx cerebri. It is seen best on frontal views as a thin strip of midline calcification and is difficult to identify on lateral views because of its thinness. Dura mater calcification at the vertex of the skull is sometimes present as a curvilinear opacity near the midline. The tentorium cerebelli is a posterior supporting structure and it can become ossified; however, this is an uncommon entity.

PACCHIONIAN BODIES

The pacchionian granules or bodies are small, localized enlargement of the pia-arachnoid that lie in pits along the vertex of the skull. When seen, they appear as small punctate calcified areas adjacent to the inner table.

SUMMARY

The most frequently seen normal intracranial calcifications have been described. Distinguishing these from pathological changes is of great importance in evaluating routine skull films. ★★★

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, King's Daughters Hospital.

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TABLE 1

A. The midline pineal structure can be seen on all three projections.
B. Bilateral choroid plexus calcification is represented at B.
C. The calcified falx is a midline structure. Its thinness frequently prevents visualization on the lateral view.
D. The dura mater calcification lies near the vertex to each side of the midline.
E. The interclinoid and petroclinoid calcifications are located at E. and are seen only on the lateral projections.

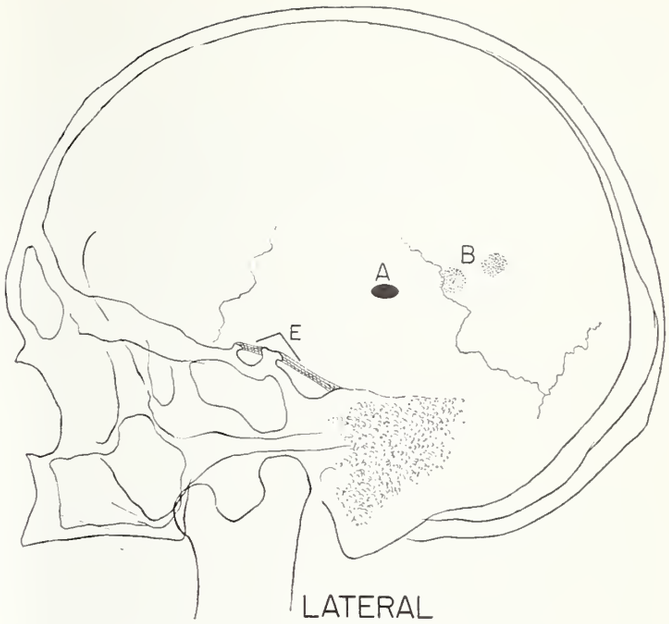


Figure 2. Lateral drawing.

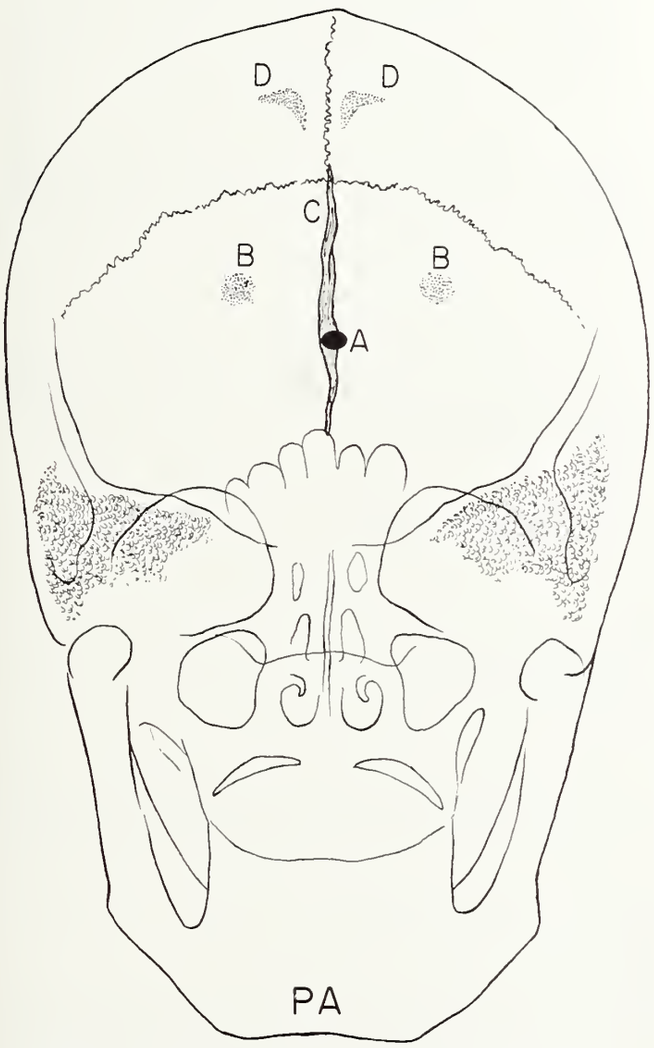


Figure 1. Postero-anterior drawing of the skull.

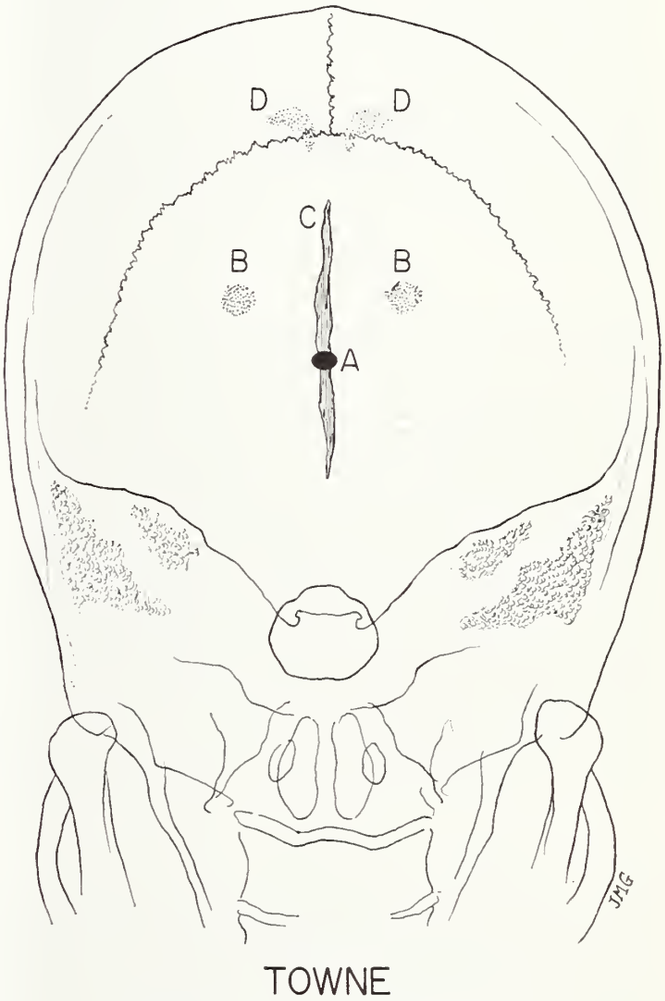


Figure 3. Towne or occipital view.

Clinicopathological Conference LIII

Conducted by the Department of Pathology
Mississippi Baptist Hospital
Jackson, Mississippi

In this month's CPC, Dr. Thomas E. Stevens discusses the care of a 60-year-old housewife with a history of long-term alcoholism. The patient's hospital record showed 17 admissions in the past 21 years for varied disorders. Other discussers are Drs. Thomas M. Davis and Arthur W. St. Clair. Dr. Louis Schiesari gives the autopsy report.

A 60-YEAR-OLD HOUSEWIFE and former registered nurse was admitted to the Mississippi Baptist Hospital on Dec. 4, 1963, because of jaundice of two days' duration. This was her 18th and last admission to the Baptist Hospital. The previous admissions are listed in Table 1 in order of dates and with the discharge diagnoses.

Review of the patient's admission charts in 1960 and 1961 revealed that in 1960 she was admitted because of nausea and yellow skin. At that time she had been well until two weeks prior to admission when she developed nausea and vomiting. This was associated with generalized malaise and weakness. Seven days later she became jaundiced and noticed that her urine had become very dark. There was no change in the character of the stools. She denied fever, chills, or abdominal pain. She had not been exposed to any person with jaundice. She had had no blood transfusions but had had some injections of B_{12} in the past six months. There had been no weight loss.

TABLE 1

1.	10/17/1940 to 10/19/1940	Acute bronchitis and upper respiratory infection
2.	6/ 6/1941 to 6/ 8/1941	Chronic sinusitis with acute bronchitis
3.	2/19/1943 to 2/22/1943	D & C for metrorrhagia
4.	5/ 6/1945 to 5/22/1945	Duodenal ulcer; subtotal gastrectomy, Polya type
5.	9/24/1945 to 9/26/1945	Acute gastritis
6.	11/16/1945 to 11/20/1945	Marginal peptic ulcer
7.	3/12/1948 to 3/15/1948	Functional heart disease
8.	5/ 6/1951 to 5/ 8/1951	Resection of blue dome cyst, left breast
9.	6/ 1/1951 to 6/ 7/1951	Hyperventilation syndrome
10.	6/26/1951 to 6/28/1951	Increased capillary permeability
11.	4/ 9/1952 to 4/22/1952	Acute gastroenteritis
12.	7/11/1953 to 7/19/1953	Total hysterectomy with right salpingo-oophorectomy for fibromyoma uteri and right ovarian cyst
13.	9/12/1955 to 9/17/1955	Hemorrhoidectomy
14.	5/21/1957 to 5/24/1957	Anxiety reaction with hyperventilation syndrome
15.	10/21/1957 to 10/29/1957	Bilateral inguinal hernia repair
16.	11/26/1960 to 1/21/1961	Acute infectious hepatitis
17.	8/23/1961 to 8/29/1961	Undiagnosed disease characterized by ecchymoses of skin, trunk, and extremities

Physical examination except for icteric skin and sclerae was essentially negative. Urinalysis was negative. The hemoglobin was 10.3 gm. per cent; WBC was 17,250 with 2 bands, 91 segmenters, 6 lymphocytes, 4 monocytes. The total protein was 4.36 with 2.16 albumin; the icterus index was 21 units; Bromsulphalein test showed a 49 per cent retention. The cephalin flocculation was 1 plus; the total bilirubin 10 mg. per cent; the amylase 8 units; the serum transaminase 46 units, and the alkaline phosphatase 15 Bodansky units. During the entire hospitalization she ran moderate intermittent temperatures ranging from 98.6 to 101.6. She was discharged after 16 days of hospitalization, markedly improved.

The next admission was on Aug. 20, 1961, because of ecchymoses of skin of trunk and extremities. The patient stated that these "red spots" broke out about two weeks after discharge from the previous admission. In the interval she had noticed an increase in appetite and had gained 11 pounds.

Laboratory data on this admission were as follows: Total bilirubin 0.1 mg. per cent; Bromsulphalein 5 per cent retention; cephalin flocculation test, trace; thymol turbidity 0.6 units; alkaline phosphatase 6 units; urea nitrogen 10 mg. per cent; prothrombin time 12 seconds; sodium 140 mEq.; potassium 3.6 mEq.; phosphorous 2.5 mg. per cent; glucose 83 mg. per cent; calcium 11 mg. per cent. Routine blood examination was within normal limits with an adequate number of platelets. The bleeding time was 2 minutes; the clotting time 7 minutes with a normal retraction time. Urine 17-ketosteroids were within normal limits. An x-ray survey of chest, skull, lumbar and thoracic spine was negative.

Clinical summaries of her last admission revealed that since the episode of jaundice in November 1960, although she had gained some weight, in general she had felt poorly and had "mental sluggishness." For the past three months she had become progressively worse. On November 29, 1963, she became anorexic and since that time had had a minimal caloric intake. For the three days preceding admission she had had a half cup of broth and a small glass of milk. Two days prior to admission she was noted to be jaundiced with a very dark yellow concentrated urine. She denied acholic stools, chills, fever, and pain of any sort. There had been no appreciable loss of weight. She had had, for the past 15 years or more, an ethanol intake of one pint to one quart per day; however, she had consumed only one pint or less per day for the past year.

Physical examination revealed a jaundiced, markedly dehydrated, disoriented, untidy, elderly white female lying quietly in bed. On admission the blood pressure was 128/80, the pulse 98, and the respiration 20; the temperature was normal. The sclerae and conjunctivae were icteric. Fine, crackling, basilar rales were heard in both lung fields. The heart was negative. The liver was palpable. There was moderate tenderness to deep palpation in the right subcostal area. The bowel sounds were active. Presence of fluid in the abdomen was questionable. No edema was present on the extremities. The skin was icteric with severe dehydration. Numerous purpuric spots and ecchymoses were present over the extremities and the trunk. No spider angiomata were seen. Neurological examination was not remarkable except for some disorientation in all spheres.

Urinalysis showed: albumin 2+, sugar negative, WBC occasional, RBC 0-1/hpf. Blood examination showed: WBC 14,200 with 11 monocytes, 4 lymphocytes, 1 eosinophil, 70 segmenters, 12 bands and 2 metamyelocytes. Hemoglobin was 10.7 gm. per cent; hematocrit, 33 vol. per cent; amylase 84 units; bilirubin, total 37 mg. per cent, direct 31 mg. per cent; cephalin flocculation 4+; alkaline phosphatase 20 Bodansky units; thymol turbidity 5.6 units; glucose 114 mg. per cent; total protein 6.15 gm. per cent; albumin 3.07 gm. per cent; globulin 3.08 gm. per cent; SGOT 200 units; CO_2 combining power 22 vol. per cent; chlorides 110 mEq.; potassium 3.5 mEq.; sodium 138 mEq.; prothrombin time, control 14 seconds, patient 22 seconds.

On the second day of admission, the temperature started to rise and on the fourth day spiked to 104.6 degrees. The patient presented general seizures. The abdomen became distended. There was bilateral clonus in the lower extremities. The patient became comatose. Two days later the temperature was 101 degrees. The seizures decreased in number which was attributed to the Dilantin treatment and R-Gene administration. The jaundice became deeper. On Dec. 9, 1963, the patient started bleeding from the mouth. The following day she was afebrile and rectal bleeding was observed. Her general condition remained unchanged and she expired quietly on Dec. 21, 1963.

DISCUSSION

Dr. Thomas E. Stevens: "I think a look at the protocol is certainly worthwhile. Generally, I think we can say to start with that this 60-year-old woman, who has a definite history of long-term alcoholism, died of a liver disease. A review

of the protocol brings to mind several things. The fact that she had 18 hospital admissions certainly gives us some introspection into her problem with alcohol. Worthy of comment is the duodenal ulcer in 1945 for which she had a subtotal gastrectomy. There is some idea, I think, that the instance of peptic ulcer is increased in cirrhosis; however, the data to support this idea are not substantial.

"In the June 1951 admission there is noted a diagnosis of increased capillary permeability. Of course, this could have some significance in view of the liver disease with which she died. In 1955 she had a hemorrhoidectomy and, of course, this at least suggests portal hypertension. In October 1957, she had a bilateral inguinal hernia repair, and it is noteworthy that there is an increased incidence of hernia with cirrhosis possibly due to increased abdominal pressure.

"The 16th hospital admission in 1960-1961 merits a little closer attention than the others. She was admitted at that time with a history of nausea and yellow skin of two weeks' duration. This later developed into nausea, vomiting, general malaise, and weakness. Seven days after the onset of this illness she became jaundiced with dark urine but no change in the character of her stools. There was no fever, no chills, and no abdominal pain. She was hospitalized when jaundice became apparent. Urinalysis was negative. There was an anemia of moderate proportions and a leukocytosis with a shift to the left. The total proteins were decreased, but the globulins were not increased. Serum bilirubin was 10 mg. per cent and the SGOT was 46 units. The alkaline phosphatase was 15 Bodansky units. During the hospitalization she developed fever. During the pre-icteric stage of this particular disorder she had had no abdominal pain. The liver was not palpable. There was never any abdominal tenderness. All of these facts, of course, are compatible with the diagnosis of hepatitis but certainly do not make the diagnosis.

"The normal value for SGOT, particularly when the disease is in the acute stage, is not compatible with a diagnosis of serum or infectious hepatitis. This could go along very well, I think, with a fibrotic process such as cirrhosis of the liver where the SGOT usually reaches proportions of 80 to 200 and sometimes is normal. In hepatitis, of course, the SGOT rises from 20 to 400 times the normal value. The alkaline phosphatase was up to 15 Bodansky units which is almost three times the normal. In hepatitis this is usually not elevated at all and rarely or hardly ever over 10 Bodansky units. Generally speaking, the alkaline phosphatase of greater than 10 to 20 units suggests post-hepatic obstruction, and values above 20 Bodansky suggest carcinoma. The value here falls in the area of obstructive jaundice, but since she had normal colored stools and no abdominal pain, this is unlikely.

"The next point is the increase in her white blood cell count with the left shift. In infectious hepatitis, you usually expect to see a normal white blood cell count with no left shift and usually virocytes. The BSP is of no value here since the patient was jaundiced and the bilirubin and BSP dye travels the same route of excretion. I would think that this first disorder was due to something other than infectious hepatitis and as a guess with no reason to make a definite diagnosis of cirrhosis would put it in the category of what has been called a florid cirrhosis.

"The next admission was eight months later for ecchymoses of the skin, trunk, and extremities. Her liver functions were checked again at that time. BSP was found to be 5 per cent, alkaline phosphatase was normal and a coagulogram, including prothrombin time, coagulation time, and clot retraction time was normal. Urinary 17 ketosteroids were within normal limits. It would be nice to have an SGOT again. This and BSP are probably the two best tests to use in following chronic liver disease. A normal coagulogram places the ecchymoses in a category outside the categories of disordered coagulation mechanism and a category of alteration of the capillary intercellular cement.

"At the time of her final admission she stated that even though she had gained some weight after 1960, she had felt poorly and had mental sluggishness from that time on. During the three months prior to her last admission in November 1963 she had become worse and was anorexic. She denied, during this period, acholic stools, chills, fever, or pain of any sort. We have her history of 15 years or more of ethanol intake of considerable proportions.

"Physical examination on this last admission showed her to be jaundiced, dehydrated, disoriented, and untidy. She had a few rales in both lung fields. The liver at this time was palpable where it had not been palpable before and was tender where no tenderness had been recorded before. There was some question of abdominal fluid. There were numerous purpuric spots and ecchymoses. There were no spider angiomata. The neurological examination was not remarkable except for disorientation in all spheres. Remarkable laboratory work on this last admission in-

cluded a 2+ albuminuria, again a leukocytosis with a left shift, a bilirubin of 37 mg. per cent which was primarily direct, a 4+ cephalin flocculation, and an alkaline phosphatase of 20 Bodansky units. Her course was progressive; she became more disoriented and developed GI bleeding. She developed bilateral clonus in her lower extremities and later had seizures. These were helped to some extent with Dilantin and R-gene.

"Now the things that struck me as being particularly pertinent in looking over the past history and particularly this last hospitalization are the following points. Her liver was palpable whereas it had not been before. It was tender where it had not been before. There was no accountable instance for her rather sudden deterioration. She had continued to drink as before. The alkaline phosphatase was elevated to the range produced by a tumor involving the liver. A high fever is a characteristic of both a florid cirrhosis and primary hepatic tumor. No chest x-ray is available. A change in the contour of her right diaphragm, a bulge or raising of it would certainly give us some help here in making my diagnosis of hepatoma, complicating a long-term Laennec's cirrhosis. The bleeding she had terminally was most probably due to the fact that her liver function had failed to the extent that the protein used in the making of the coagulation factors had been depleted. As second choice to explain the bleeding a duodenal ulcer or esophageal varices should be mentioned."

FINAL DIAGNOSIS

Dr. Louis Schiesari: "Concluding, your final diagnosis is what?"

Dr. Stevens: "My final diagnosis would be long-term hepatic cirrhosis of Laennec's type, complicated terminally by a primary hepatoma."

Dr. Schiesari: "You mentioned a florid cirrhosis during your discussion."

Dr. Stevens: "There is very little, as far as I know, to discuss about this entity except that it is a type of cirrhosis that is associated with fever with a high white blood cell count with a shift to the left. These characteristics distinguish it from the usual afebrile course of cirrhosis with a normal WBC."

Dr. Schiesari: "Dr. Davis, this was your patient. Do you have anything to add?"

Dr. Thomas M. Davis: "Her admitting diagnosis was Laennec's cirrhosis. There was some question as to whether her liver was palpable. I personally felt that it was palpable. I had seen this patient once prior in the emergency room in a state of alcoholism and that probably had something to do with my diagnosis of cirrhosis. I had the feeling that she was a chronic alcoholic although this was my first time to admit her. I concur with Dr. Stevens in regard to the diagnosis of cirrhosis of the liver although I can't completely exclude a hepatoma.

"I think this general episode has been described as a flare-up of a chronic state going into an acute phase but whether this is due to an infectious nature or whether it is just a nutritional thing I don't think I could definitely say. In spite of the elevated white count it makes you wonder if infection is not a factor here. During her illness infectious hepatitis was considered to the extent that it was questioned as to whether the people around her should have immune globulin. The history does not mention it, but the patient had an admission prior to this in a New Orleans hospital where she had been worked up because of her bleeding tendencies."

Dr. Stevens: "Every known coagulating mechanism factor is in some way affected by a diseased liver."

Dr. Davis: "Her bleeding was recorded as some from the mouth and some from the rectum, that was not a particular problem in treating this patient and we took that as what we could expect. She was not bleeding severely. Her demise was not caused by hemorrhage."

Dr. Arthur W. St. Clair: "I think there is acute liver failure on the evidence of the tests, but I don't believe that pancreatic disease has been completely excluded. I think that possibly thromboembolic phenomena could have something to do with these terminal seizures."

Dr. Stevens: "I should say that regardless of what she had, she probably died in hepatic coma, and this was without a doubt the major factor here. The bleeding in her GI tract effects an increase in serum ammonia. These two things probably were done, but I think it should be mentioned that clearing the GI tract of blood and protein and administration of Neomycin are important portions of the therapy of hepatic coma."

Dr. Davis: "This was done. She was given sulfonamide."

POSTMORTEM REPORT

Dr. Schiesari: "At postmortem examination the patient was jaundiced; multiple petechiae and ecchymoses were present on the trunk and extremities; there were about 1500 cc. of yellow watery fluid in the abdominal cavity. The liver weighed 4000 gm. It was greenish-yellow, ap-

parently smooth at the first glimpse but finely granular upon close inspection and under the fingers and cut with an increased resistance. The gallbladder and the duodenum were edematous. The pancreas was of normal size and shape but contained numerous necrotic yellowish-green areas.

"The microscopic examination of the liver (Figures 1 and 2) revealed delicate collagen bands upsetting the lobular architecture; cholestasis as

Figure 1.

evidenced by the presence of bile pigments in the hepatic cells and bile plugs in the canaliculi; diffuse fatty changes with fatty cysts; hydropic and hyaline degeneration. A lymphocytic infiltration, in general never conspicuous, was present in the portal triads and along the fibrous septa. From this picture we can readily rule out hepatitis, either in the acute, subacute, or cirrhotic stages.

"Of all the features enumerated, the most striking and characteristic was the hyaline degeneration that goes under the name of alcoholic hyaline of Mallory's bodies. This peculiar degeneration is so rarely found in other types of liver injuries that practically it has become a diagnostic hallmark of the active phase of alcoholic cirrhosis. This intracytoplasmic hyaline, a soluble basic protein or a phospholipid protein complex, is preceded by the hydropic changes. It is first granular and later becomes condensed and homogenous and is usually located in the vicinity of the nucleus. The presence of these Mallory's bodies has also a prognostic significance in that patients with such changes tend to develop a greater degree of hepatic decompensation and have a higher death rate.

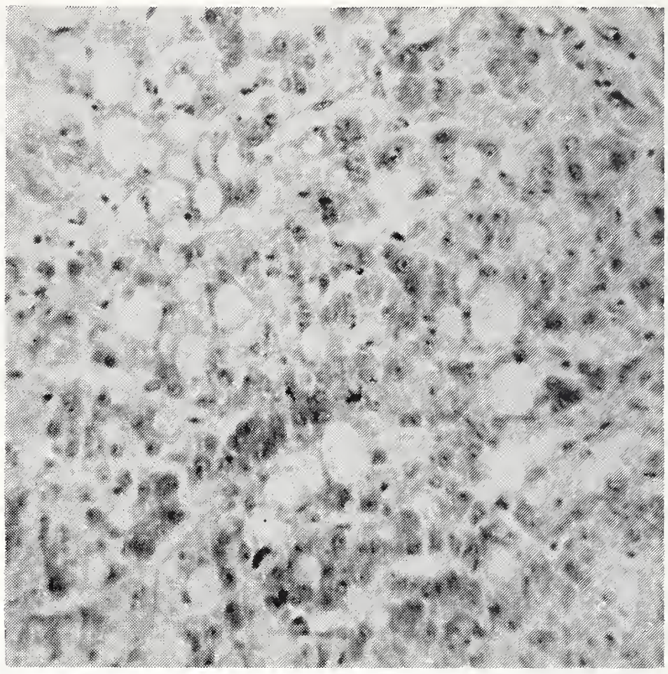


Figure 2.

The complex morphologic changes of this type of liver injury are associated with a syndrome clinically characterized by jaundice, fever, leukocytosis and hepatomegaly with hepatic tenderness. This syndrome, first called acute hepatic insufficiency of the chronic alcoholic, is now better known as florid cirrhosis of the liver.

"We do not see many such cases in this hospital; this type of cirrhosis is much more common in institutions with large numbers of 'skid row' patients. The pancreas is involved in about 30 per cent of the cases of cirrhosis. In this case it was the site of an acute suppurative process, probably to be attributed to the edema around the head of the pancreas or to the infection or both. The ecchymoses of skin and intestinal hemorrhages were evidently caused by the hepatic insufficiency. It should be of interest to note that in patients treated with Dicumarol an increased prothrombin time to 22 seconds does not produce hemorrhagic manifestations. But when the liver is profoundly involved all phases of coagulation are more or less affected; the platelets are normal in number but their function is poor and there is often high plasma fibrinolytic activity. In closing, this was a case of alcoholic subacute hepatic necrosis in the process of passing over into cirrhosis." ★★★

1190 North State St.

Book Reviews

Diseases of the Skin. Fifth edition. By George Clinton Andrews, M.D., and Anthony N. Domonkos, M.D., 749 pages with 605 illustrations. Philadelphia: W. B. Saunders Company, 1963. $16.50.

The fifth edition of *Diseases of the Skin* by Drs. George Andrews and Anthony Domonkos is an excellent reference for the practitioner or student. The material is comprehensive but concise when one considers that most available dermatology, with the exception of pathology, is included.

The index is detailed and includes differential diagnosis and laboratory findings.

Commendable attention has been given to allergy and new discoveries concerning autosensitization and autoimmunity. Contact and occupational dermatitides are accorded recognition with their expanding role in current practice. There is an ever increasing list of provocative chemicals inflicting themselves upon the integument.

Excellent coverage of collagen diseases and descriptions of some of the more recently recognized diseases of the reticuloendothelial system are well documented.

The first two chapters are concerned with anatomy, pathology, and general diagnosis and the last three discuss ionizing radiation therapy and the physical methods of dermatologic therapy. There is a very timely discussion of the uses and contraindications of steroid therapy.

The book is an excellent text for the student and a thorough reference for the practitioner.

JAMES H. MELVIN, M.D.

Preventive Medicine in World War II: Communicable Diseases. Prepared by the Medical Department, United States Army with Colonel John Boyd Coates, Jr., M.C., editor in chief and Ebbe Curtis Hoff, M.D., editor for preventive medicine, Office of the Surgeon General, Department of the Army. Washington: U. S. Government Printing Office, 1963. $6.25.

The history of medicine in World War II is being written in separate series of volumes for clinical and preventive medicine. This is volume VI of the history of preventive medicine series and is devoted entirely to the control of malaria.

To obtain a full picture of the problems imposed by malaria upon the armed forces in World War II the reader will need to consult the appropriate volume of clinical medicine history. This volume takes up the problems and control measures in each of the theaters of operations as well as the tables of organization for each. This makes for rather tedious reading in order to get to the problems encountered and the measures used to control them.

It is pointed out that many of the prevention and control methods finally arrived at during World War II were already known prior to that time but were not readily available to all levels of command. This accounted for some loss of time and troop effectiveness before this information was relearned and procedures established for the commanders in the field. For this reason this volume should prove valuable in the future for ready reference during similar situations where masses of personnel are introduced into an area of malaria endemicity. For the use of most medical practitioners, however, this information is more readily available in the newer textbooks of medicine and tropical diseases.

W. E. RIECKEN, JR., M.D.

Books Received

Case Studies in Obstetrics and Gynecology. By F. Jackson Stoddard, Associate Clinical Professor of Obstetrics and Gynecology, Marquette University School of Medicine, Milwaukee, Wisconsin. 312 pages with illustrations. Philadelphia: W. B. Saunders Company, 1964. $8.50.

Cancer of the Stomach. By William H. Remine, M.D., M.S. in Surgery, James Priestley, M.D., M.S. in Experimental Surgery, Joseph Berkson, M.D., D.Sc., and Members of the Staff of the Mayo Clinic. 255 pages with illustrations. Philadelphia: W. B. Saunders Company, 1964. $11.50.

Advances in the Treatment of Menstrual Dysfunction. Edited by Alvin F. Goldfarb, M.D. Assistant Professor of Obstetrics and Gynecology, Jefferson Medical College, Philadelphia. 188 pages with 96 illustrations. Philadelphia: Lea & Febiger, 1964. $4.00.

The President Speaking

'The Allied Professions'

OMAR SIMMONS, M.D.
Newton, Mississippi

A CRITICALLY ILL PATIENT is seldom, if ever, restored to health by a single individual, because today's advanced medical care is a team effort representing many skills and specialized efforts. Of course, the physician is in the forefront. It is he who assumes responsibility, makes medical judgments, and, indeed, directs the process from beginning of care to recovery. But he could do little, were it not for the allied professions and able nonprofessionals who reinforce his professional endeavors.

The American Medical Association has been alert in recognizing the necessity of defining and clarifying relationships with the several allied professions. The report in this connection which was adopted by the House of Delegates has become the basis for constructive discussions among medicine and organizations representing nursing, the various medical and allied technologies, physical therapy, clinical psychology, and even the pre-clinical sciences and disciplines.

All too frequently, some of these groups find themselves at cross purposes with the medical profession. Many, if not most, of these differences can be dissolved when communication between the groups has been firmly established. It would be extraordinary to discover that any difference could separate members of the health care team to an extent overshadowing the common interests which bind them together. We, therefore, have the challenge of carrying to the state and national levels the same substance of understanding which prevails in the community hospital where the physicians and members of allied professions stand side by side for a common purpose, the well-being of the patient. ★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume V, Number 6

June 1964

EDITORIALS

NFME—Private Philanthropy At Its Best

I

PRIVATE PHILANTHROPY dedicated to the support of medical education has steadily diminished during the past half century. More recently, the schools have looked to government for increasing amounts with which to carry out increasingly complex missions in teaching and research. But there's a happy aberration in the downward curve, emerging only 15 years ago. It is the National Fund for Medical Education which depends solely upon private enterprise, mostly corporate sources, in seeking new and additional voluntary support of the nation's accredited medical schools.

This unsung foundation is quietly effective in marshalling important support for medical education. During 1963, for example, the National Fund raised more than $3.2 million against the American Medical Association Education and Research Foundation's $1.2 million. Through 13 years of consecutive grant distribution, it has given the schools about $35 million, primarily for support of teaching budgets. Its gifts are unrestricted, an aspect which enhances the dollars considerably, because the schools may apply them where they are most needed.

This year, the National Fund has programmed gifts to the approved schools totaling nearly $2.9 million. Of the $2.4 million distributed in 1963, the University of Mississippi School of Medicine received $25,115, based upon a uniform class A grant of $15,000 and a class B distribution in an amount equal to $35 for each undergraduate medical student. Overall contributions were received from 1,708 corporations and 403 individuals, with every cent given voluntarily.

II

The National Fund for Medical Education was organized in 1949 under the leadership of Dwight D. Eisenhower, then president of Columbia University, the American Medical Association, and the Association of American Medical Colleges. In 1954, the fund received a congressional charter. Its stated objectives are to strengthen the nation's ability to survive by training a sufficient corps of skilled men and women to care for the people's health and medical needs, to interpret the needs of medical education to the American public, and to encourage the development and advancement of constantly improving standards of medical education. Of high importance is its goal of preserving academic freedom for medical education.

The roster of officers and directors reads like a *Who's Who* in the American industrial and business community. The honorary chairman is Herbert Hoover, and S. Sloan Colt, the distinguished

New York banker-financier, is president. Fund raising divisions include 55 categories of manufacturing, banking and finance, communications, transportation, utilities, distribution, and professions other than medicine. Examples of voluntary corporate support in 1963 are gifts of $369,000 from the life insurance industry, $365,000 from drug makers, $211,000 from petroleum producers, and $164,000 from food processors.

Local sponsoring committees of private citizens turn in good accountings for their efforts, too. In Chicago, 164 contributors gave more than $172,000. The overall endeavor is well organized, fortunate in leadership, and accelerating in impact.

III

Perhaps the most significant aspect of the National Fund is its leadership. The business and industrial community understands what's involved in earning and wisely spending a dollar. Unlike some programs of federal aid, the fund is captained by executives who are what they are because of peculiar abilities to size up a problem, find solutions, and go after results.

In a poignant declaration of good corporate citizenship, Mr. Colt addresses himself to the business world in this way: "In considering its contributions to medical education, a corporation should think in terms of a national gift. . . . It matters little what is developed in the research laboratory unless such findings can be translated into better health care. It is the well trained doctor who can do this and bring the benefits of scientific progress to the patient. Without this, medical advances remain sterile."

American physicians, it seems, could have no stronger encouragement for supporting their own AMA-ERF than that which they find in the example and vision of the National Fund. After all, it's about the best way of demonstrating that voluntarism is neither old fashioned nor a dirty word. —R.B.K.

Labor's Blueprint For American Hospitals

A recent white paper, "Policy Statement on Hospitals," issued by the AFL-CIO Executive Council contains all the ingredients necessary to induce cold chills, fear, and trembling into any private hospital's board of trustees and professional staff. The 12 page document gets off the ground with platitudes characteristic of similar diatribes by assessing the progress and importance of hospitals. Then comes the blast.

They cost too much to use, and they are built without sound planning. Continues labor's brass, there are too many small hospitals, deficiencies in facilities, insufficient use of diagnostic and treatment capabilities for outpatients, lack of assurance of quality, and sorry methods of financing care. However unrelated labor's gripes against health insurance and prepayment to its dissatisfaction with physical plants may be just doesn't seem to matter. Moreover, they make a strong pitch for "group practice," the city slicker expression for closed panel care plans.

But the AFL-CIO also has solutions which can be nutshelled into five words: Federal takeover with labor's advice. Areawide hospital planning, labor on hospital governing boards, collective bargaining for hospital employees (nothing about high costs here), and more government in the sickroom are a few of the panaceas offered.

Interestingly enough, an astonishingly similar program was implemented in British hospitals in 1948 when the National Health Service program swallowed up private medical services in the United Kingdom. Need more be said?—R.B.K.

Politics and Health: A New Hazard

Every day, the clinicians and researchers are turning up hitherto unknown causes for old diseases, new and esoteric disorders, and a host of relationships between the usual and the unusual. Comes now the Surgeon General of the U. S. Public Health Service, Dr. Luther L. Terry, with a tongue-in-cheek theory on politics and health.

Addressing the American Society of Newspaper Editors in Washington, Dr. Terry stole the show with a satirical takeoff on the recent deluge of study reports which are dramatically announced as having established a causal relationship between this and that.

"The political virus," the Surgeon General said, "seems to follow a cyclical pattern. It occurs in epidemic form every four years with localized outbreaks in between." He reported that investigation has confirmed a relationship between politics and foot-in-mouth disease, strain on the larynx, limp and crushed right hands, and a vision defect described as teeveeitis. He even believes that a

chronic condition known as fence-sitting can be associated with politics, because it has been observed to produce extreme tenderness at the seat of government.

Dr. Terry promised that U.S.P.H.S. would continue research in this area. He added that he understands that "the Federal Trade Commission is considering plans to look into misleading political advertising, such as platform promises, bumper stickers, and the like."

The only joke about Dr. Terry's joke is that it's no joke at all: People are getting a little ill over some political goings on.—R.B.K.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

Anderson, Jack Loyd, Natchez. Born Waco, Texas, Nov. 30, 1931; M.D., University of Texas Medical Branch, Galveston, 1959; interned St. Joseph Hospital, Ft. Worth, Tex., one year; neurology and psychiatry residency, John Sealy and Affiliated Hospitals, Galveston, Texas, three years; elected Sept. 24, 1963, by Homochitto Valley Medical Society.

Atchison, William David, Gulfport. Born Birmingham, Ala., Sept. 8, 1926; M.D., Medical College of Alabama, Birmingham, 1952; interned Barnes Hospital, St. Louis, Mo., one year; residency, North Carolina Memorial Hospital, Chapel Hill, two years; residency, University of Mississippi School of Medicine, Jackson; member, College of American Pathologists and the International Academy of Pathology; certified by the American Board of Pathology; elected Nov. 6, 1963, by Coast Counties Medical Society.

Barnes, Roy James, Senatobia. Born Memphis, Tenn., Feb. 8, 1937; M.D., University of Tennessee College of Medicine, Memphis, 1962; interned St. Joseph Hospital, Memphis, Tenn., one year; elected April 2, 1964, by North Mississippi Medical Society.

Bramlitt, Eddie Eugene, New Albany. Born Memphis, Tenn., July 5, 1929; M.D., University of Tennessee College of Medicine, Memphis, 1952; interned U. S. Naval Hospital, Philadelphia, Penn., one year; residency, John Gaston Hospital, Memphis, Tenn., 4½ years; residency, Memorial Hospital for Cancer and Allied Diseases, New York, N. Y., one year; member American College of Surgeons; certified by the American Board of Surgery; elected April 2, 1964, by North Mississippi Medical Society.

Centanni, Lee-Russell Benedict, Pascagoula. Born New Orleans, La., Aug. 2, 1910; M.D., Tulane University School of Medicine, New Orleans, La., 1933; interned Charity Hospital of Louisiana, New Orleans, one year; elected July 10, 1963, by Coast Counties Medical Society.

Cotten, Milam Sylvester, Moss Point. Born McComb, Miss., Nov. 30, 1934; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned U. S. Naval Hospital, Portsmouth, Va., one year; elected Nov. 6, 1963, by Coast Counties Medical Society.

Cox, Charles Julius, Bay St. Louis. Born St. Louis, Mo., July 18, 1932; M.D., Louisiana State University School of Medicine, New Orleans, 1960; interned Touro Infirmary, New Orleans, La., one year; elected March 11, 1964, by Coast Counties Medical Society.

Foret, Gerald Lee, Natchez. Born Ville Platte, La., Sept. 3, 1936; M.D., Louisiana State University School of Medicine, New Orleans, 1961; interned Southern Baptist Hospital, New Orleans, La., one year; GP residency, Lafayette Charity Hospital, La., one year; elected Sept. 24, 1963, by Homochitto Valley Medical Society.

Herrington, Joe Dennis, Natchez. Born Ackerman, Miss., Sept. 27, 1935; M.D., University of Mississippi School of Medicine, Jackson, 1960; interned University of Mississippi School of Medicine, Jackson, one year; captain, U. S. Air Force, two years; elected Sept. 24, 1963, by Homochitto Valley Medical Society.

Iles, Jerry Wayne, Natchez. Born DeRidder, La., Oct. 18, 1932; M.D., Louisiana State University School of Medicine, New Orleans, 1958; interned North Louisiana Sanitarium, Shreveport, one year; residency, Huey P. Long Charity Hospital, Pineville, La.; captain, U. S. Army, four years; elected Jan. 28, 1964, by Homochitto Valley Medical Society.

Kendrick, James Barton, Meridian. Born Houston, Texas, Nov. 4, 1933; M.D., University of Mississippi School of Medicine, Jackson, 1960; interned St. Thomas Hospital, Nashville, Tenn., one year; elected Feb. 4, 1964, by East Mississippi Medical Society.

KETCHUM, THOMAS LOWELL, Ripley. Born Tippah County, Miss., Oct. 16, 1933; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned U. S. Naval Hospital, San Diego, Calif., one year; elected April 2, 1964, by North Mississippi Medical Society.

LEVENS, JOHNNY BLACKWELL, JR., Waveland. Born Gulfport, Miss., Dec. 11, 1932; M.D., University of Mississippi School of Medicine, Jackson, 1961; interned Mississippi Baptist Hospital, Jackson, one year; elected Nov. 6, 1963, by Coast Counties Medical Society.

MOORE, PAUL HAROLD, Pascagoula. Born Louisville, Miss., May 11, 1927; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned Memorial Hospital of Chatham County, Savannah, Ga., one year; radiology residency, University of Florida Teaching Hospital and Clinics, three years; elected Nov. 6, 1963, by Coast Counties Medical Society.

PLAUCHE, WARREN CHARLES, Biloxi. Born Houma, La., Feb. 2, 1933; M.D., Louisiana State University School of Medicine, New Orleans, 1957; interned Brooke General Hospital, San Antonio, Texas, one year; ob-gyn residency, University of Mississippi School of Medicine, Jackson, three years; certified by the American Board of Ob-Gyn; captain, U. S. Army, three years; elected Nov. 6, 1963, by Coast Counties Medical Society.

SULLIVAN, BILLY LEE, Columbus. Born Macon, Tenn., Oct. 23, 1932; M.D., University of Tennessee College of Medicine, Memphis, 1956; interned John Gaston Hospital, Memphis, Tenn., one year; radiology residency, University of Tennessee College of Medicine, Memphis, three years; elected March 10, 1964, by Northeast Mississippi Medical Society.

THORNTON, JAMES LEE, New Albany. Born Grenada, Miss., Aug. 4, 1935; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned John Gaston Hospital, Memphis, Tenn., one year; elected April 2, 1964, by North Mississippi Medical Society.

TROTTER, WILLIAM PAYNE, Ripley. Born Blytheville, Ark., June 12, 1931; M.D., University of Tennessee College of Medicine, Memphis, 1958; interned Martin Army Hospital, Fort Benning, Ga., one year; member American College of Allergy; captain, U. S. Army, four years; elected April 2, 1964, by North Mississippi Medical Society.

WILLIAMS, JAMES KINABREW, JR., Pascagoula. Born New Orleans, La., Aug. 20, 1928; M.D., Louisiana State University School of Medicine, New Orleans, 1959; interned Confederate Memorial Medical Center, Shreveport, La., one year; ophthalmology residency, Milwaukee County Hospital, Wisc.; elected March 11, 1964, by Coast Counties Medical Society.

DEATHS

BROCK, LUCIUS WILLIAM, McComb. M.D., Tulane University School of Medicine, New Orleans, La., 1911; former vice-president of MSMA; first president of Pike County Medical Society; died April 17, 1964, aged 76.

FEW, MARVIN JASPER, Rolling Fork. M.D., University of Tennessee College of Medicine, Memphis, 1924; interned Memphis General Hospital, Tenn.; private, U. S. Army; died April 20, 1964, aged 70.

PERSONALS

PERRIN BERRY of Jackson was named vice chairman of the Hinds County Heart Council for 1964-65 at the May meeting. ALBERT MEENA of Jackson will be the medical representative.

R. T. DABBS was chosen first chief of staff for the newly opened Aberdeen-Monroe County Hospital. Other members of the initial staff are R. E. COGHLAN, assistant chief of staff; D. W. BRICE, secretary of staff; F. F. KENNEDY, R. E. WOODRUFF, JAMES W. JACKSON, JOHN N. TURNAGE, and LEE R. MURPHREE.

RAYMOND MARTIN, JR., has been named to the board of directors of the Jackson Parents' League.

REGINALD P. WHITE has been appointed director of the East Mississippi State Hospital at Meridian. Dr. White succeeds Dr. Glenn B. Carrigan, who has served as acting director since September 1962. The new director has served as senior psychiatrist and director of out-patient service at the Mississippi State Hospital at Whitfield since 1961.

Simmons and Crawford Head MSMA; House Votes Smoking a Health Hazard

Dr. Everett H. Crawford of Tylertown followed in his father's footsteps as he was elected president-elect of the Mississippi State Medical Association at the close of MSMA's 96th Annual Session.

Dr. Omar Simmons of Newton, center, was inaugurated as MSMA president at the close of the 96th Annual Session. He is flanked by Dr. John G. Archer of Greenville, immediate past president, and Dr. Everett H. Crawford of Tylertown, president-elect.

His father, Dr. B. L. Crawford of Tylertown, served as MSMA president in the terms 1944-45 and 1945-46, the only man to serve two terms because there was no meeting during the war years.

As the House of Delegates adjourned *sine die,* Dr. Omar Simmons of Newton was elevated to the presidency, succeeding Dr. John G. Archer of Greenville. Dr. Simmons is a well-known figure in Mississippi medical organization having served as president of the Mississippi Hospital Association, the East Mississippi Medical Society, and the Mid-South Postgraduate Medical Assembly.

Named secretary treasurer was Dr. James L. Royals of Jackson. New vice presidents elected were Dr. Rhea L. Wyatt of Holly Springs, northern area; Dr. Paul B. Brumby of Lexington, mid-state area, and Dr. W. W. Walley of Waynesboro, southern area.

Trustees named to the MSMA board were Dr. Charles W. Patterson of Rosedale, district 1; Dr. Joseph B. Rogers of Oxford, district 2, and Dr. J. T. Davis of Corinth, district 3. As officers for the coming year the board elected Dr. John B. Howell, Jr., of Canton, chairman; Dr. Lamar Arrington of Meridian, vice chairman, and re-elected Dr. C. D. Taylor, Jr., of Pass Christian, secretary.

The House was opened Monday by President Archer who later presented the annual President's Address. Said Dr. Archer, "By tacit common consent, a substantial segment of the American med-

Two of MSMA's three new vice presidents are Dr. W. W. Walley of Waynesboro, left, and Dr. Rhea L. Wyatt of Holly Springs, right. Dr. Paul B. Brumby of Lexington is not shown.

ical scientific community seems to have resigned itself to the belief that only the federal government can finance its ongoing activity in education, research, and the extension of medical care resources."

He challenged the delegates to "resolve that this sickness shall not be fatal to the high goal of healing nor to the nation we love."

Key speaker before the House open session on Monday was AMA President Edward R. Annis of Miami, Fla. Dr. Annis described what he had discovered about the medical systems in Europe during his tenure as president of the World Medical Association. He said he had found two reasons for the problems of socialized medicine in Europe: (1)There is no single voice for medicine in many countries so medicine has a low priority. (2) There is no place for young physicians. They must wait until someone dies or retires.

"They are turning out the brains and then have no place for them," he said. "Their young men are waiting to fill dead men's shoes."

In England, said Dr. Annis, medicine has sunk to such a low priority in the eyes of government that they have built only one hospital while we have built 900. "We have hospitals in towns of 6,000 as good as the best in England," he said.

Dr. Annis described the plight of the general practitioner under the British system of socialized medicine in which only the appointed hospital consultant is allowed to practice his full skills. Often, he said, the harried GP can spend only three minutes with each patient. "Perhaps," he noted, "the GP 'sees' 40, 50, or 60 patients a day but only examines one." This is because the really sick patients must be sent to the hospital, said the AMA president, "Under this system, you are just a sorter," he summed up.

Also during the Monday session, delegates heard reports of officers and committees and resolutions were introduced. During the Thursday session final action was taken on all reports and new officers were elected. Two key measures concerned tobacco and health and voluntary health agencies.

After a lengthy floor discussion, the House approved a resolution stating that MSMA believes smoking is potentially hazardous to health and commending organizations engaged in the education of the public concerning such hazards.

Proponents of the resolution cited the surgeon general's report and held that the AMA would take a stand against smoking at its next annual meeting. Opponents charged "why single out one hazard to oppose" and questioned the conclusiveness of current data.

On recommendation of the Reference Committee on Medical Practices, the House voted that MSMA would no longer approve or disapprove voluntary health agencies. Said the committee, ". . . evaluation of voluntary health associations with a view toward approval entails not only the sanction of medical programs but also those of fund raising, administration and personnel policies as well." The final, approved statement read, "The Mississippi State Medical Association neither approves nor disapproves of any legitimate, established voluntary health agency. It is a policy of this association to offer guidance to such organizations and medical advice in connection with their several and respective activities."

In other action the House

—recommended implementation of teaching programs in charity hospitals, stating that the programs will benefit the state, increase teaching opportunities and upgrade the quality of care in charity hospitals.

—reaffirmed the association's policy of providing care for veterans with service-connected disabilities under the Veterans Administration medical program and stated that veterans requiring care for nonservice-connected disabilities should provide it themselves or, if medically indigent, should be state or local responsibilities.

—opposed compulsory area-wide planning for hospitals as promulgated by agencies of the federal government.

—requested that the 12 medical directors of the Blue Cross-Blue Shield Plan, the Mississippi Hospital and Medical Service, exert an effort to reevaluate Blue Shield payments in the light of present medical care costs.

—expressed appreciation to the more than 60 physicians who contributed time and professional services as "Doctors of the Day" in the Emergency Medical Care Unit at the State Capitol, and to the registered professional nurse, Mrs. Ila G. McCleave, for her services.

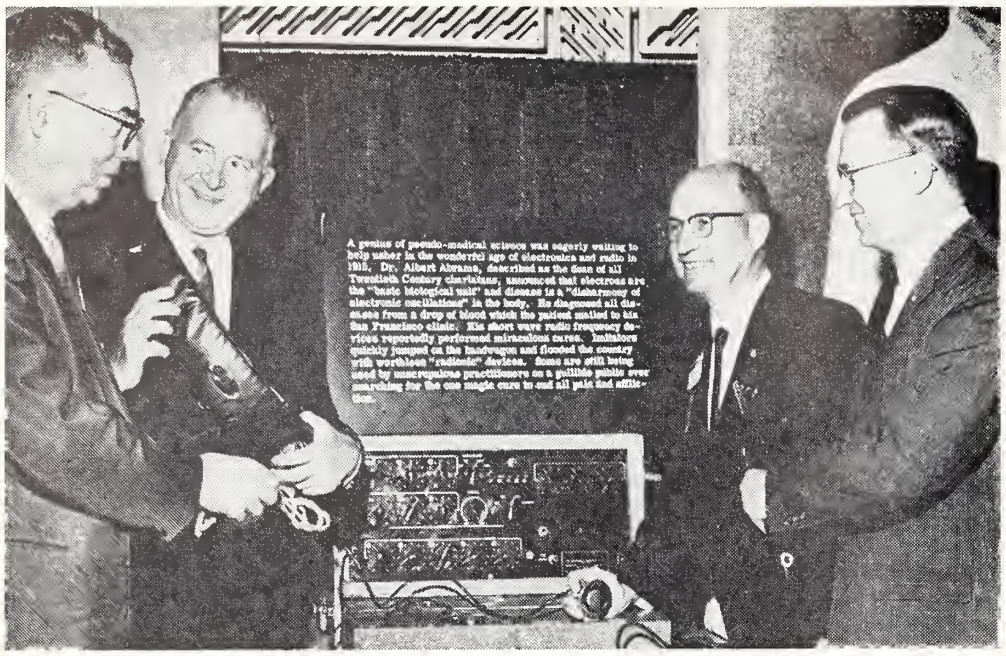
—approved guides developed by a joint liaison committee of the Mississippi Hospital Association and MSMA.

—opposed the granting of prize money for the high school essay contest sponsored by the Association of American Physicians and Surgeons.

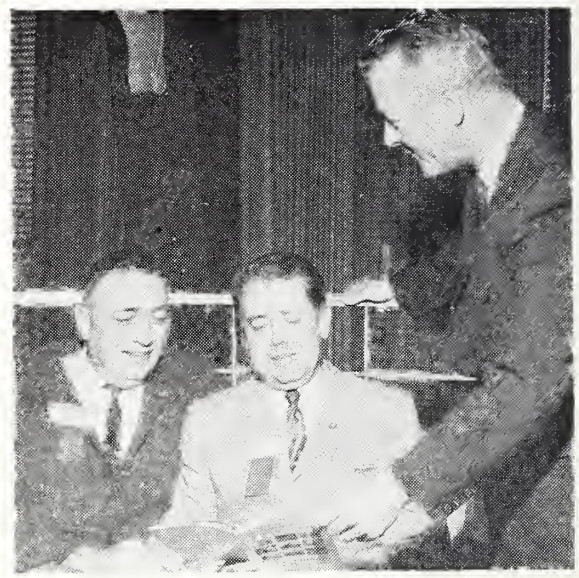
—agreed that the association can profit by combining scientific work and presenting essays before general sessions rather than by having simultaneous meetings at future annual sessions.

—resolved that MSMA re-examine its position in relation to the treatment of charity patients admitted to hospitals under the State Hospital Com-

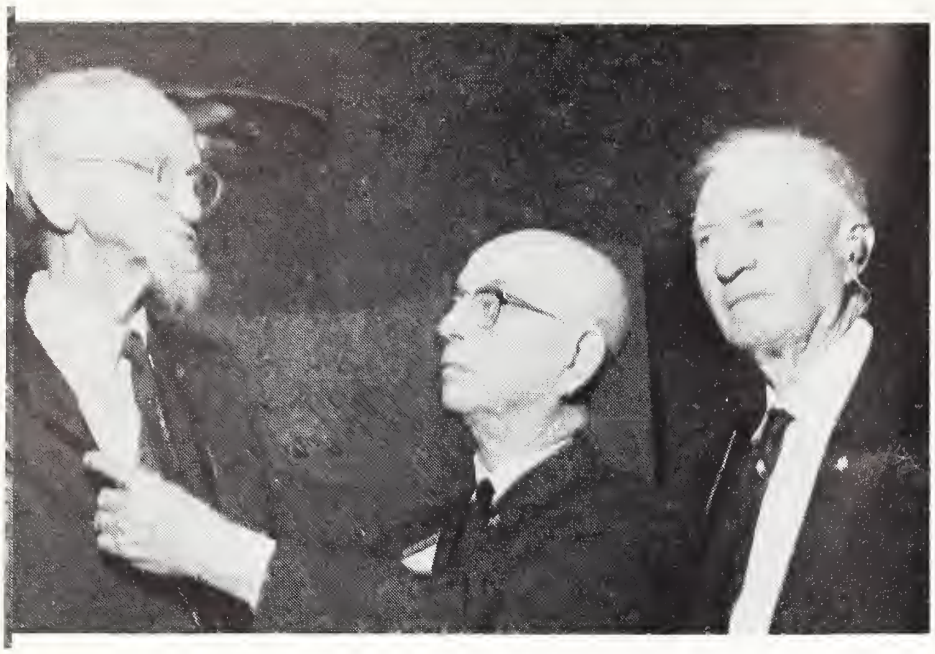
MSMA's House of Delegates opened its 96th Annual Session May 11 and heard addresses by MSMA President John Archer and AMA President Edward Annis, upper left. Shown on the rostrum are Official Recorder Cleta Brinson, MSMA Executive Secretary Rowland B. Kennedy, Vice Speaker Howard Nelson, Speaker B. B. O'Mara, Board Chairman John B. Howell, Jr., and Secretary-Treasurer C. G. Sutherland. Opposite, a brotherly handshake is given new MSMA President Omar Simmons by Dr. W. C. Simmons of Bay Springs. MSMA's first husband-wife delegate team, Dr. Dennis Ward and Dr. Mary Ward of Corinth, look over their folders, bottom right. And, bottom left, two MSMA leaders, Board Secretary C. D. Taylor, Jr., and Speaker O'Mara take time out for a coffee break.

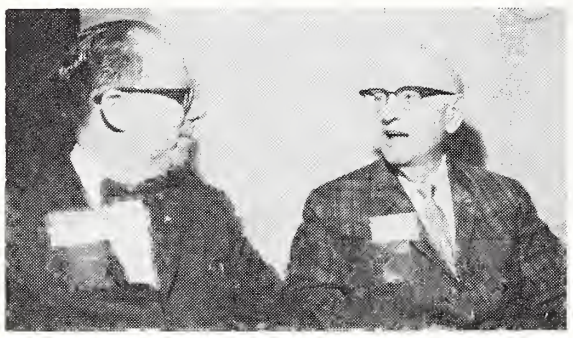


SPEAKERS FOR THE CONGRESS on Quackery look over a "radionic" device guaranteed to diagnose all disorders and cure all ills. Left to right are Dr. William Gordon, Oliver Field, and E. C. Boudreaux with Congress moderator, Dr. W. E. Lotterhos. Below, left, Dr. O'Mara makes a point about the quackery exhibits to medical students John Ricks and James Broom of Jackson as Dr. W. L. Stallworth of Columbus looks on. It was a return engagement as Dr. Paul B. McCleave, on phone upper right, a speaker on last year's Seminar on Medicine and Religion, returned as featured speaker for the Woman's Auxiliary. At right MPAC officials, Dr. George Twente and Dr. Nelson, talk with Jack Drake of AMPAC.



PAST PRESIDENTS OF MSMA met with the 1962-63 president, Dr. C. P. Crenshaw. From the left are Drs. Archer, Crenshaw, President-elect Simmons, B. S. Guyton, and G. Swink Hicks. At the annual banquet, Trustee Mal S. Riddell admires the new hat modeled by his wife, outgoing Auxiliary president. And the man responsible for the hat and the accompanying commentary, banquet speaker Dr. John B. Howell, Jr., is shown at the microphone. Below left, Dr. Howard Nelson receives the third annual Robins Award. From the left, are Robins representatives Robert L. North and Bobby Pope, Dr. Nelson, and Dr. Archer.





OLDEST AND YOUNGEST doctors at the Fifty Year Club breakfast get acquainted at upper left. Shown are Dr. John S. McIntosh, 89; Dr. Julian Bailey, 73, and Dr. Rome G. Dabbs, 89. Annual session time is a good opportunity for old and new friends to talk over medical affairs. From the top are Dr. Louis P. River, Oak Park, Ill., International College of Surgeons speaker, with AMA delegate, Dr. C. P. Culpepper; SMA Executive Secretary Robert Butts with SMA President R. D. Moreton, Ft. Worth, Texas; MSMA Past Presidents Stanley A. Hill and E. LeRoy Wilkins, and UMC Dean Robert Q. Marston with Dr. G. Lamar Arrington, MSMA Board vice chairman. Below, Drs. Howell and Sutherland are shown with WJTV's Charley Tapley, center, before they were "on camera" for "Mississippi Morning."

mission program in the light of House Bill 135 which relieves physicians from joining in the determination and certification of the indigency of persons qualifying for indigent hospital care.

—reaffirmed its opposition to compulsory federal health care of the aged under Social Security as proposed in H.R. 3920 and S. 880, the King-Anderson bills.

—proclaimed Dr. H. H. McClanahan, Jr., of Columbus, who retired as chairman of the MSMA Board of Trustees after serving on the board for 12 years, Trustee Emeritus of the Mississippi State Medical Association.

Other officers elected in the general elections included Dr. Howard A. Nelson of Greenwood, who was named to succeed Dr. B. B. O'Mara of Biloxi as speaker of the House of Delegates. Dr. William E. Lotterhos of Jackson will be vice speaker. Dr. George H. Martin of Vicksburg was re-elected associate editor, and Dr. George E. Twente of Jackson was re-elected AMA delegate. Dr. Stanley A. Hill of Corinth is alternate delegate.

Physicians named to councils included Dr. Daniel L. Hollis of Biloxi, Budget and Finance; Dr. E. LeRoy Wilkins of Clarksdale, Medical Education; Dr. John B. Howell, Jr., of Canton, Constitution and By-Laws; Dr. Paul B. Brumby of Lexington, Dr. William E. Lotterhos of Jackson, and Dr. Lamar Arrington of Meridian, Legislation; Dr. A. T. Tatum of Petal, Dr. G. Swink Hicks of Natchez, and Dr. W. J. Weatherford of Pascagoula, Judicial Council; Dr. T. E. Ross of Hattiesburg; Dr. Richard J. Field, Jr., of Centreville, and Dr. James T. Thompson of Moss Point, Medical Service.

Named to the Board of Directors, Mississippi Hospital and Medical Service were Drs. G. Swink Hicks of Natchez; R. B. Caldwell of Baldwyn; George H. Martin of Vicksburg, and T. E. Ross of Hattiesburg.

Fraternal delegates will be Dr. William T. Oakes of Amory, to Alabama; Dr. C. G. Sutherland of Jackson, to Arkansas; Dr. Victor E. Landry of Lucedale, to Louisiana, and Dr. Stanley A. Hill of Corinth, to Tennessee.

State Specialty Societies Name Officers

The Mississippi Diabetes Association met May 12 during MSMA's 96th Annual Session for organizational purposes.

Dr. Karleen B. Neill of Jackson was named temporary chairman and Dr. W. Johnson Witt, also of Jackson, was named temporary secretary-treasurer. An executive committee of six was named for incorporating purposes.

New officers of other specialty groups meeting concomitantly with MSMA are:

Mississippi Association of Pathologists: Dr. Louis Schiesari of Jackson, president; Dr. Joel Brunson of Jackson, president-elect; Dr. Kenneth Heard of Jackson, secretary.

Dr. Frederick Tatum of Hattiesburg, left, outgoing president of the Mississippi Society of Internal Medicine, congratulates the new officers, Dr. S. H. McDonnieal of Jackson, center, president, and Dr. C. E. Wallace of Jackson, secretary.

Mississippi Urological Association: Dr. Sidney O. Graves, Jr., of Natchez, president; Dr. Frank Carey of Greenville, president-elect; Dr. Joel Alvis of Jackson, secretary.

Mississippi Chapter, American Academy of Pediatrics: Dr. Guy C. Jarratt of Vicksburg, chairman; Dr. Howard H. Nichols of Jackson, alternate chairman; Dr. Noel C. Womack, Jr., of Jackson, secretary.

Mississippi Ob-Gyn Society: Dr. Daniel R. Thornton, Jr., of Meridian, president; Dr. Chester H. Lake of Jackson, president-elect; Dr. John E. Lindley of Meridian, vice president; Dr. O. B. Wooley of Jackson, secretary.

International College of Surgeons, Mississippi Chapter: Dr. H. Grady Cook of Hattiesburg, president; Dr. R. Mayo Flynt, of Meridian, president-elect; Dr. Willis Walker of Hattiesburg, secretary.

Flying Physicians Association, Mississippi Chapter: Dr. William M. Wood, Carthage, president; Dr. Samuel B. Johnson of Jackson, secretary; Dr. Curtis W. Caine of Jackson, disaster chairman.

Mississippi EENT Association: Dr. Emmett M. Herring, Jr., of Hattiesburg, president; Dr. Samuel G. Mounger of Greenwood, president-elect; Dr. Samuel B. Johnson of Jackson, secretary-treasurer; Dr. Francis McCullough of Jackson, and Dr. John White of Jackson, councillors.

Mississippi Society of Internal Medicine: Dr. S. H. McDonnieal of Jackson, president; Dr. Eugene M. Murphy, III, of Tupelo, vice president, and Dr. C. E. Wallace of Jackson, secretary.

Saunders Announces Recent Publications

W. B. Saunders Company features the following new books in their full page advertisement appearing elsewhere in this issue:

CHILD—THE LIVER AND PORTAL HYPERTENSION
New!—The first of a series of monographs on selected major problems in clinical surgery. Covers all aspects of the subject.

BEARD AND WOOD—MASSAGE
New!—A well-illustrated guide to the best use of massage. Delineates principles and specific technique.

1963-1964 MAYO CLINIC VOLUMES
New!—The convenient way to keep up with newest developments from the Mayo Clinic. Both Medicine and Surgery are covered.

Dr. Holmes Is President Of Institutions Board

Dr. Verner Holmes of McComb has taken office as president of the Board of Trustees of the Mississippi Institutions of Higher Learning.

The Board is responsible for Mississippi's three state universities and five state colleges. Prior to taking over the chairmanship, Dr. Holmes served as vice chairman of the Board. He has also served as chairman of the Medical Affairs Committee.

Dr. Holmes' other activities include membership on the Planning Committee of the University Medical Center in Jackson and chairmanship of the Gulf Coast Research Laboratory.

Sections Hear 28 Essayists, Elect Officers

Physicians attending meetings of MSMA's seven scientific sections heard 28 essayists and elected new officers.

Special features were a Symposium on Narcotic Addiction conducted by the Section on General Practice and a Seminar on Malignancy of the Breast conducted by the Section on Surgery.

Drs. Herring and Sneed

Opening the Symposium on Narcotic Addiction, Dr. John B. Howell, Jr., of Canton said, "Narcotic Addiction in the United States is a medical and social problem of staggering dimensions. . . . Nearly every addict must sense the futility of his condition, and society has generally failed to appreciate what science knows must be done to meet the problem effectively."

He noted that in reporting its studies and policy recommendations on the problem of narcotic addiction, the MSMA Board of Trustees said, "The problem is serious, dangerous, and complex, demanding urgent and decisive action to meet it effectively." Said Dr. Howell, "The association believes that the succession of events over 50 years has demonstrated that an enlightened government and a dedicated, practical scientific community can succeed in rising to this crucial challenge without perpetuating its ills."

Drs. Kitchings and Thornton

Another speaker, Carl DeBaggio, chief counsel of the Treasury Department's Bureau of Narcotics, defined drug addiction as "not a disease per se but it seems to be a manifestation of an inadequate person unable to cope with the problems of regular life."

Mr. DeBaggio went into the problem of when may a physician prescribe drugs for an addict. He said, "The courts have not considered the furnishing of narcotics to an addict merely to satisfy his craving as being in the course of professional practice."

Drs. Mangold and Brister

"On the other hand," he continued, "I think it is equally clear that doctors may furnish narcotic drugs to an addict in the course of trying to cure the addict of his addiction."

Dr. Robert W. Rasor, medical director of the U. S. Public Health Service Hospital in Lexington said people "who become addicted today start to experiment with drugs about age 16."

"This is the transition from childhood to adulthood, and the period when a person is most susceptible to drugs," he said.

Dr. Rasor warned the physicians to be alert to the dangers of addiction for themselves. "We admit some 50 physicians a year as drug addicts at Lexington," he said, "and about 50 additional patients are nurses."

Drs. Atkinson and Field

Dr. W. L. Jaquith, director of the Mississippi State Hospital at Whitfield, noted that the problem is "not a new one in Mississippi." He reported that a total of 271 first admissions to the Mississippi State Hospital for treatment for drug addiction was made during a five year period between 1958 and 1963. The ratio between the male and female addict is fast becoming an even one, he said.

Dr. Jaquith discussed treatment and said, "The prognosis depends usually on the personality defect underlying the addiction and, therefore, must always be guarded." The director concluded, "In my opinion it becomes worse with the duration of the addiction and the type of drug used."

At the last minute two of the participants in the Seminar on Malignancy of the Breast were unable to be present. Dr. James D. Hardy, who was to moderate the panel, was out of town because of a death in the family, and Dr. Nylene E. Eckles of Houston, Texas, a chemotherapeutist, was held in flight by weather conditions. Dr. Harvey Johnston, Jr. took Dr. Hardy's place and Dr. Warren N. A. Bell substituted for Dr. Eckles.

A Greenville surgeon, Dr. George F. Archer, told the attending physicians, "At present our greatest hope for reducing the high rate from cancer of the breast lies in teaching all women to carefully examine their own breasts once a month and to report to their doctor any suspicious lumps."

Participants on the Symposium on Narcotic Addiction, sponsored by the Section on General Practice, get together before the meeting. From the left are Dr. John B. Howell, Jr., of Canton; Dr. Robert W. Rasor of Lexington, Ky.; Carl DeBaggio of Washington, D. C.; Dr. W. L. Jaquith of Whitfield, and Dr. J. Roy Bane of Jackson, section chairman.

He noted that there is a tremendous individual variation in the resistance of a patient to cancer of the breast. "Since there is this variation in response," he said, "perhaps the future may see the development of some means of increasing the body's resistance to cancer, so that even when we cannot remove all the cancer cells we can still produce a change in the body's metabolism so that it will no longer be susceptible to the cancer's growth."

Dr. Thomas F. Puckett of Hattiesburg discussed cancer of the breast from the pathologist's standpoint.

New section officers named to the 1964-65 Council on Scientific Assembly include:

Section on EENT—Ralph Sneed, Jackson, chairman; E. M. Herring, Jr., Hattiesburg, secretary

Section on General Practice—Max L. Pharr, Jackson, chairman; Maxwell D. Berman, Jackson, secretary

Dr. E. C. Schultz of Memphis, Tenn., guest essayist before the Section on EENT, makes a point to Dr. DeWitt Hamrick, Corinth otolaryngologist and JOURNAL MSMA *associate editor, as Dr. Charles M. Murry, Jr., of Oxford, section chairman, looks on.*

Section on Medicine—F. Earl Fyke, Jr., Jackson, chairman; A. B. Smith, Meridian, secretary

Section on Ob-Gyn—John T. Kitchings, Jackson, chairman; Daniel R. Thornton, Meridian, secretary

Section on Pediatrics—Maria J. Mangold, Yazoo City, chairman; Samuel L. Brister, Jr., Greenwood, secretary

Section on Preventive Medicine—W. E. Noblin, Jr., chairman; secretary to be named.

Section on Surgery—R. J. Field, Jr., Centreville, chairman; Jack A. Atkinson, Brookhaven, secretary.

Drs. Nelson and Busey Receive MSMA Awards

MSMA's two top awards were presented to Dr. Howard A. Nelson of Greenwood and Dr. John F. Busey of Jackson during the annual banquet May 13.

Dr. Nelson was presented the third annual Robins Award for distinguished and outstanding community service. The bronze plaque is given annually by MSMA in conjunction with the A. H. Robins Company.

A past president of MSMA, Dr. Nelson is currently president of the Greenwood Chamber of Commerce, the first practicing physician to hold this office since the Chamber's founding in 1911. He is now serving his fourth year as a member of the State Board of Nurse Examiners and is chairman of the Medical-Professional Board of United Cerebral Palsy of Mississippi. In 1962 Dr. Nelson was president of the University of Mississippi Medical Alumni and is a member and immediate past chairman of the Board of Directors of the American Cancer Society, Mississippi Division, and a member of the State Advisory Committee of the National Foundation.

The Greenwood physician served for two years as president of the Leflore County Chapter of the cancer society and is now vice president of the Leflore County Chapter of the American Heart Association. In 1962 he received the Delta Council Leadership Award for his work with the Boy Scouts and other youth activities, and at every home game he is found on the bench with his Greenwood High School football team.

Other nominees for the Robins Award were Drs. Jim G. Hendrick of Jackson, nominated by the Central Medical Society; Maura J. Mitchell of Ellisville, South Mississippi Medical Society; L. B. Morris of Macon, Northeast Mississippi Medical Society; C. D. Taylor, Jr., of Pass Christian, Coast Counties Medical Society.

The Board of Judges, composed of the three association vice presidents, stated that their task of selecting a single recipient was "most difficult."

Dr. Thomas G. Ross of Jackson was the first recipient of the Robins Award in 1962. Dr. Frank M. Davis of Corinth received the second award in 1963.

The scientific award, given annually for the best scientific exhibit, was awarded this year to Dr. John F. Busey of Jackson. His exhibit was entitled "North American Blastomycosis."

Designed and struck by L. G. Balfour Company of Attleboro, Mass., the award is a mounted sculptured medallion with MSMA's crest on the obverse side and the award identification and engraving plate on the reverse side.

Second place in the judging went to Dr. Oscar E. Hubbard of Jackson for his exhibit on "The Therapeutic Community; Psychiatric Units in General Hospitals." Taking third place was "Transplantation of Organs" by Dr. James D. Hardy of Jackson.

Thoracic Society Names Officers

The Mississippi Thoracic Society held its tenth annual meeting on Thursday, April 16, at the University Medical Center in Jackson. Dr. Clyde A. Watkins, president, and Dr. Willard Boggan, program chairman, presided.

New officers elected at the business meeting of the society include: Dr. Jesse L. Wofford, Jackson, president; Dr. John I. Davis, Natchez, vice-president; Dr. Guy Campbell, Jackson, representative councilor to the American Thoracic Society; Dr. Myra Tyler, Jackson, secretary-treasurer. Executive Committee members elected for a one-year term included Dr. Fred Allison and Dr. Willard Boggan, both of Jackson.

The scientific program featured addresses by Dr. John S. Chapman, professor of medicine, Southwestern Medical School, Dallas, Texas, speaking on "The Epidemiology of Anonymous Mycobacteria"; and Dr. Osler Abbott, professor of thoracic surgery, Emory University School of Medicine, Emory University, Georgia, whose subject was "Factors Influencing Morbidity and Mortality in Patients 60 and Over Undergoing Thoracotomy."

Shown are officers of the State Thoracic Society with guest speakers. Front row, left to right, are Dr. Myra Tyler, Jackson, secretary-treasurer; Dr. Jesse Wofford, Jackson, president, and Dr. Clyde Watkins, Sanatorium, past-president. Back row, left to right, are Dr. John Chapman, Dallas, guest lecturer; Dr. Guy Campbell, Jackson, American Thoracic Society representative councilor; Dr. Osler Abbott, Atlanta, guest lecturer, and Dr. Fred Allison, Jackson, executive committee member.

Special case presentations of unusual and interesting respiratory diseases and conditions were presented by Dr. Richard Riley, Meridian; Dr. Sam Robinson, Jackson; Dr. Fred Tatum, Hattiesburg; Dr. Jack Herring, Sanatorium; and Dr. Walter Rose, Indianola.

The society's next regularly scheduled scientific meeting will be held on Jan. 8-9, 1965, at the Buena Vista Hotel, Biloxi, Miss. This meeting will be a consecutive case conference and will include physicians interested in tuberculosis and other respiratory diseases from Alabama and Louisiana as well as Mississippi.

Any physician interested in membership in the Mississippi Thoracic Society is invited to contact any of the officers listed above or address your inquiry to Mississippi Thoracic Society, P. O. Box 9865, Northside Station, Jackson, Miss.

No Quacks At MSMA Congress

In his opening remarks to the Congress on Health Quackery, Dr. William H. Gordon, a Lubbock, Texas, internist, said, "When a speaker talks on surgery, you assume he's a surgeon; when he discusses internal medicine, you take him for an internist, and when he talks on obstetrics, you decide he's an obstetrician. Well, I've been asked to speak on quackery. . . ."

None of the four speakers conducting the Congress on Health Quackery qualified as quacks, but they brought an abundance of information on the subject to MSMA physicians attending the May 13 session.

Opening the Congress, MSMA President John G. Archer, attacked chiropractic in a statement that was promptly challenged by Dr. John P. Charles, public relations director of the Mississippi Chiropractic Association.

Said Dr. Archer, "There is no shred of demonstrable scientific evidence to support and validate the dogma of chiropractic." "If their fantastic premise were valid in the remotest sense," he continued, "it would have been discovered long before an unlearned fish merchant espoused it" (A reference to D. D. Palmer who began the practice of chiropractic in 1885).

"We are concerned," the Greenville internist continued, "that a fraudulent, discredited dogma is practiced in the shadow of this metropolitan area where a cultist claims he can cure diseases with a punch in the spine."

Dr. Archer noted that Mississippi is one of three states, including Louisiana and Massachusetts, which deny chiropractors "the badge of sanction and legality that they so earnestly seek." "To do so," he said, "would be to make a mockery of our school of medicine, of our hospitals, of our medical profession, and most important of all, of the intelligence of Mississippians."

Following press reports of Dr. Archer's comments, the Mississippi Chiropractic Association issued a statement labeling the MSMA's president's talk "false and misleading" and challenging the state medical association to a television debate.

Read the chiropractors' statement, "The scientific fact that interference with the nervous system by vertebrae in the back being misaligned pinching nerves has been substantiated by both medical scientists and independent research laboratories throughout the world."

Oliver Field, director of the AMA Department of Investigation was another speaker during the Congress. He displayed numerous quack remedies that his department has collected over the years. Among them were the old stand-by Hadacol and a product called Sea Brine—billed as good for such varied disorders as grey hair and schizophrenia.

Mr. Field also discussed the AMA investigation of Krebiozen, "the cancer drug," at length.

He reviewed the work of the two national conferences on health quackery and said that one principle that had come out of them was "law is necessary but education is the most important thing." He discussed a course designed for the public school curriculum and added "we hope to make skeptics out of the school children as they come along."

"You might say this is a type of preventive medicine," he continued.

A paper prepared by Dr. Martin Dobelle of the Bureau of Medicine, Food and Drug Administration, was read by E. C. Boudreaux of New Orleans, director of the FDA district office. Using slides, Mr. Boudreaux described FDA investigations of quack machines.

"Science has stripped away the mystery of quack devices and left bare the truth, which is that there are no secret cure-all machines," he said.

Mr. Boudreaux noted that the federal food-drug-cosmetic act "does not empower the government to regulate the practice of medicine. This is left to the states through their medical practice laws and regulations."

Dr. Gordon closed the Congress with a discussion of motives or "why are quacks successful." He said that victims of quacks have a belief in impossible things, "a once-upon-a-time land where wishes come true."

"The quack can lead his subject up to the portal, but the victim opens the door himself," he continued. "No one is duped by a quack without his full permission."

State Morbidity Reported Through May 8

The Mississippi State Board of Health reports the following occurrence of morbidity for 1964 through the 19th week of the year, ending May 8, 1964. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	357
Tuberculosis, O. F.	75
Salmonella Infections	10
Brucellosis	1
Encephalitis, infectious	7
Typhoid Fever	1
Dysentery	
Bacillary	25
Amoebic	5
Diphtheria	1
Septicemia, Staph.	2
Meningococcal infection	11
Meningitis, O. F.	11
Tularemia	1
Mononucleosis, infectious	35
Toxoplasmosis	1
Hepatitis, infectious	95
Tetanus	1
Helminthic infections	
Hookworm	365
Ascariasis	112
Strongyloides	22
Histoplasmosis	5
Streptococcus infections	
Scarlet fever	112
Strep throat	1,945
Taeniosis	2
Pertussis	51
Measles	6,253
Chickenpox	997
Mumps	812
Other Cestode Infestations	6
Influenza	342
Gonorrhea	2,054

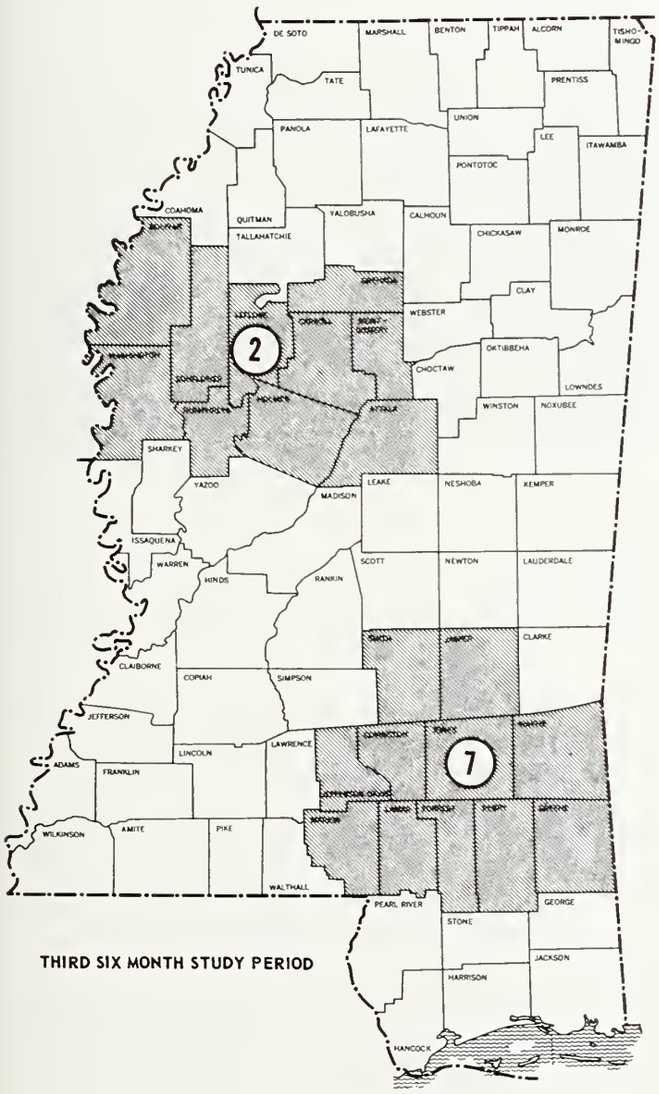
Syphilis
Early 128
Late 67

21 Additional Counties Join Crash Injury Study

Beginning July 1, physicians in 21 Mississippi counties will be asked to participate in the third study period for the state in the automotive crash injury studies of the Cornell Aeronautical Laboratory, Inc.

Counties included in the third period are Bolivar, Washington, Sunflower, Humphreys, Leflore, Holmes, Carroll, Grenada, Montgomery, Attala, Smith, Jasper, Jefferson Davis, Covington, Jones, Wayne, Marion, Lamar, Forrest, Perry, and Greene.

Since its inception, the purpose of this research has been to obtain reliable data on the specific causes of injury of occupants of cars involved in accidents, rather than on the causes of the accidents.



Mississippi is the 25th state to participate in the program. During the two year study, doctors will be asked to provide medical information only during the six-month period in which their county is represented in the sampling area. The first period began July 1, 1963. On an average 20 counties are involved at a time.

WMA Issues Warning To U.S. Physicians

The World Medical Association warned that "doctors' strikes in the so-called 'advanced nations' are just one more sign of the uphill struggle that our own system of medicine faces to preserve its freedom and identity."

The note of caution was issued by the United States Committee of WMA, according to Dr. Raymond F. Grenfell of Jackson, Mississippi chairman, who released details of a policy statement from the organization relating to the Belgian situation.

"In Belgium," the statement declared, "the representative groups of specialists and the G.P.'s were not united and failed to protest the introduction of the Leburton Social Security Act in November 1962. The Belgian Medical Federation still had not protested the Leburton Act in July 1963, when, after assurances from the Minister of Health to Belgian doctors that their association would be consulted on implementation of the law, the Belgian parliament passed the measure.

"These assurances later proved to be false, paving the way for a doctors' strike due to many objectional features of the law."

WMA, through national committees, represents private practitioners in 58 nations of the noncommunist world. It functions as the international counterpart to such organizations representing state medicine through governments as the World Health Organization (WHO), United Nations Economic, Social, and Cultural Organization (UNESCO), International Labour Organization (ILO), International Social Security Association (ISSA), and other such bodies.

Dr. Grenfell said that the United States Committee is headed by Dr. Austin Smith of Washington, former editor of *Journal AMA,* and Dr. Gerald D. Dorman of New York, currently a member of the AMA Board of Trustees. The president of WMA is Dr. Edward R. Annis of Miami, incumbent president of the American Medical Association.

Dr. Simmons Inaugurated MSMA President

Dr. Omar Simmons of Newton, well known leader in state medical organization, was inaugurated president of MSMA at the close of the 96th Annual session held May 11-14 in Jackson.

Dr. Simmons completed his pre-med education and his first two years of medical school at the University of Mississippi and received his medical degree from Tulane University School of Medicine in 1927. He interned at John Gaston Hospital in Memphis, Tenn.

Dr. Simmons

A past president of his local medical society, East Mississippi, Dr. Simmons has also served as president of the Mississippi Hospital Association and the Mid-South Postgraduate Medical Association. He was MSMA treasurer for two terms.

Dr. Simmons is a native of Louin in Jasper County. His brother, Dr. W. C. Simmons, practices in Bay Springs.

Mrs. Safley Heads State Auxiliary

Mrs. T. J. Safley of Jackson was inaugurated president of the Woman's Auxiliary to MSMA during the 41st Annual Session conducted May 11-13 in Jackson.

Mrs. Safley

Mrs. Safley has served the state auxiliary as corresponding secretary, recording secretary, and treasurer, and is a past president of the Central Medical Auxiliary.

A native of Ruleville, Mrs. Safley is a graduate of Delta State College in Cleveland. She was the top graduate in both her high school and college classes. She did graduate work in English at Duke University in Durham, N. C., and taught high school English and French prior to her marriage.

Dr. and Mrs. Safley have three sons—Tom, 22, now finishing his second year of medical school at Tulane; Charles, 19, a freshman at Vanderbilt; and Bill, 14, who is completing the ninth grade at Bailey Junior High.

Mrs. Safley is an avid garden club member and says she spends most of her time "raising flowers and boys."

State Auxiliary Meets For 41st Session

The Woman's Auxiliary to the Mississippi State Medical Association met May 11-13 for its 41st Annual Session.

During the general session on May 12, Mrs. T. J. Safley of Jackson was inaugurated president

Auxiliary incoming and outgoing officers, escorted by their physician-husbands, were introduced to the House of Delegates during the May 14 session. From the left are Dr. T. J. Safley of Jackson with Mrs. Safley, incoming president, and Dr. Mal S. Riddell of Winona, with Mrs. Riddell, immediate past president.

succeeding Mrs. M. S. Riddell, Jr., of Winona. Mrs. J. Hurd Gaddy of Gulfport was named president-elect.

Special guests of the auxiliary were Mrs. William H. Evans, president-elect, Woman's Auxiliary to AMA, and Mrs. Paul Gray, president, Woman's Auxiliary to the Southern Medical Association.

The Reverend Dr. Paul B. McCleave, director of the AMA Department of Medicine and Religion, was the speaker for the luncheon meeting.

Volume V
Number 7
July 1964

JOURNAL of the Mississippi STATE MEDICAL ASSOCIATION

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The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, $5 per annum; $1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

July 1964

Dear Doctor:

Whether it's a drug, dietary, or even a shoe appears to be a moot point under interpretation of toughened up Food and Drug regulations. Mead Johnson's Quell, described as a modified Sippy dietary, has been called a drug by FDA. Maker insists it's properly labeled as a nutritional product for use by peptic ulcer patients.

> Most incredible pronouncement relates to Japanese-made tennis shoe for which maker claimed therapeutic benefits. FDA said shoe must be submitted for approval because inner sole was said to be of new type which prevents athlete's foot. It passed FDA tests, and shoe is now formally classified as a drug.

Two-year old boys appear to be more vulnerable to accidents than any other age-sex group in the pediatric range, so say four New York researchers. Study of over 9,000 children under age seven showed male aged two accident rate at 229 per 1,000 with falls causing 48 per cent of injuries.

Federal loans to optometry students, proposed in H.R. 8546, is running into stiff opposition before House Subcommittee on Public Health and Safety. Both AMA and U.S. Public Health Service have testified in opposition to measure. Medical spokesmen said AMA position is based on historic opposition to all student loans from federal sources.

Neighboring city of Birmingham, Ala., has levied a new income tax, largely aimed at professional persons. Impost includes "occupational license tax" of 1 per cent on salaries of all individuals who work in city and $3 for every $1,000 above annual gross of $10,000 on physicians, attorneys, and other professional persons.

Agriculture department is investigating mold on foreign-grown peanuts which some suspect of being a health hazard. Called aspergillus flavus, the fungus has been shown to produce poison fatal to fish and fowl and said to cause cancer in rats. Investigators say no danger to human beings has been demonstrated yet nor has U.S. peanut crop been seriously contaminated.

Sincerely,

Rowland B. Kennedy
Executive Secretary

Bills Would Exempt Blood Banking From Anti-Trust Laws

Washington - Four measures before Congress propose to exempt any nonprofit blood bank or physician from Sherman and Clayton anti-trust laws when they refuse to accept blood from any source for purposes of protecting human health. AMA, acting on pronouncement of 1963 Portland meeting, strongly supports legislation. In some instances, refusal to accept blood could now be in restraint of trade.

New Organization Assures Medical Care For Travelers

New York - The International Association for Medical Assistance to Travelers with offices in Rome, Toronto, and New York, will help world travelers cope with the most difficult problem of tourism, illness abroad. Founded as a nonprofit body by a Rome cardiologist, IAMAT guarantees services of English-speaking physicians in Europe, Africa, Asia, and Latin America. Directories of carefully selected physicians in major world cities are available free from travel agents.

FDA Is Requiring Proof Of Efficacy In Drugs

Washington - A new FDA regulation requiring proof of efficacy of drugs introduced since inception of the government approval program in 1938 has been instituted, which means that Koagamin, Cathams' parenteral hemostat, the first drug approved in 1938, must be substantiated as "efficacious." Relatively few drugs will be involved, however, since most agents in chemotherapeutic armamentarium have been recently developed.

AMA Warns Of Fiberglass Vaulting Pole Dangers

Chicago - High school pole vaulters, now beating the 16 foot mark, may be risking serious injury if their fiberglass poles are too light for their weights. This was the warning of AMA's Committee on Medical Aspects of Sports who said young athletes, trying for whiplike action, may use a pole lighter than safety requires with chance of breaking or even impaling the vaulter. Each fiberglass pole is rated on flexural, tensile, and compressive strength for definite vaulter weight limits.

Medical Care For Service Retirees Is Considered

Washington - House Armed Services Committee is studying a report from the Secretary of Defense in conjunction with proposals to provide medical care for those who have retired from military services and their dependents. Four possibilities are treatment exclusively in military hospitals, inclusion in original Medicare program, private insurance, and the federal employees health care program.

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
July 1964, Vol. V, No. 7

ORIGINAL PAPERS

Abdominal Myomectomy: A Surgical Procedure in Infertility Patients

WILLIAM B. WIENER, M.D., and CHARLES M. HEAD, M.D.
Jackson, Mississippi

The authors discuss abdominal myomectomy in the treatment of fibroids of the uterus. They establish criteria for the use of this surgical procedure, review the literature and the records of St. Dominic's and Mississippi Baptist Hospitals, and report a series of five cases.

ABDOMINAL MYOMECTOMY is a surgical procedure which should receive more consideration in the treatment of leiomyomas (fibroids) of the uterus in any woman in the childbearing age. In our practice, we have in the past few years, seen five patients who had myomectomies and subsequently became pregnant. All five of these have delivered. Because of this, we feel myomectomy is a good procedure in infertility patients with fibroids; however, a review of the literature shows that, depending upon the series, only 20 to 50 per cent of the patients who had abdominal myomectomies in the childbearing age later became pregnant.

At St. Dominic's Hospital over a ten-year period, from Jan. 1, 1953, to Dec. 31, 1962, there were 39 patients who had abdominal myomectomies in the nonpregnant state. Seven patients had myomectomies at the time of cesarean section. Of the 39 nonpregnant patients, 19 had been pregnant prior to surgery with 16 of these pregnancies going to term. After myomectomy, 10 of the patients had 18 pregnancies with 15 resulting in full-term living infants.

At the Mississippi Baptist Hospital over the same ten-year period, there were 42 nonpregnant patients who had abdominal myomectomies. One had a myomectomy when she was five months pregnant because of severe pain and seven had them at the time of cesarean section. Of the 43 patients who had myomectomies, other than at cesarean section, 18 had been pregnant before the surgery with 13 of the pregnancies going to term. After myomectomy, five patients became pregnant and four went to term. The ages of the patients at both St. Dominic's and Baptist Hospital can be seen in the table below.

Age	*St. Dominic's*	*Baptist*
20-30	13	11
30-40	26	25
40-45	0	5
45-50	0	2
Youngest	22	21
Oldest	39	47

Read before the Mississippi Obstetrical and Gynecological Society, Jackson, Oct. 12, 1963.

As the records of each hospital are for that hospital alone and there is no cross-index so as to determine whether or not a patient who had surgery in one hospital delivered at the other, these statistics are probably not too valid in regard to the number of pregnancies following surgery. Also the follow-up period is not long enough for any conclusions.

OPERATIVE INDICATIONS

Myomectomy, therefore, is a surgical procedure which should receive consideration in the treatment of any woman in the childbearing age who has symptomatic fibroids. Unfortunately, uterine fibroids are often associated with salpingitis and/or abdominal adhesions. It is also difficult to determine whether fibroids will cause sterility or spontaneous abortions. Most physicians have seen many women with fibroids from small to large size who have had one or more children. If a woman with uterine fibroids under the age of 42 desires to have more children, or is a sterility problem, or has had two or more spontaneous abortions, a myomectomy should be offered to her provided no other cause for the sterility or abortions can be found. Myomectomy, then, would be indicated in any woman in the childbearing age who has fibroids with symptoms warranting surgery who desires to retain her reproductive and menstrual function, in patients with a sterility problem, and in habitual aborters in whom no other cause for the infertility can be found. The symptoms could be excessive menstrual flow with resulting chronic anemia, pressure symptoms, or rapid growth of previously asymptomatic fibroids. Contraindications would be ovarian or tubal pathology causing closure of the tubes, malignancy of these or other pelvic organs.

In performing abdominal myomectomies, the tubes and ovaries should be thoroughly inspected. If they are found to be normal, a myomectomy should be performed. Rubin[7] has suggested using a tourniquet to control the blood supply and help prevent excessive blood loss. He describes a method in which a small opening is made in the avascular portion of each broad ligament at the level of the internal os, placing a catheter through these openings, crossing the catheter posterior to the body of the uterus, pulling it tight and holding it with a hemostat. He feels that the myomectomy can usually be completed in ten minutes, but should it take longer, the tourniquet should be loosened at least every ten minutes. In enucleating or removing the myomas, if possible, only one incision should be made in the uterine wall and the fibroids shelled out through this one opening. Sometimes this is not feasible, and then as few incisions as possible should be made. If there is a submucosal fibroid, it may be necessary to enter the endometrial cavity. After shelling out the fibroids, the defects are closed in from two to four layers as necessary to control the bleeding. If a tourniquet has been used, it should be removed and the uterus carefully checked to be sure there is no active bleeding.

In the articles reviewed, the authors suggested doing as little as possible other than the myomectomy; however, in the few we have done, we usually remove the appendix if it is present. In the St. Dominic's Hospital series, appendectomy was done in 17 cases. Other procedures consisted of uterine suspension in 5 cases, ovarian resection in 6. Seven patients had lysis of adhesions, seven had some type of surgery on one or both ovaries and tubes, 8 had a D & C, 2 had presacral neurectomies, 2 had Marshall-Marchette suspension of the urethra, and 1 had a perineorrhaphy. At the Mississippi Baptist Hospital, appendectomies were done in 20 cases, uterine suspensions in 10. Twelve patients had surgery on one tube or ovary, 2 had plastic procedures on tubes, 2 had bilateral salpingectomies, 4 had lysis of adhesions, and 7 had presacral neurectomies. In some of these patients it was difficult to see why a myomectomy was done, especially if both tubes were removed. Certainly in the patients past the age of 30, if there is no chance for pregnancy and myomas are present, a hysterectomy would probably be a much better procedure.

DELIVERY PROCEDURE

Should the patient become pregnant following myomectomy, there should be careful consideration as to how she should be delivered. Again, in reviewing the literature, most of the authors advised vaginal delivery unless the endometrial cavity was entered during the myomectomy or the patient had a septic course postoperatively. As in any other obstetrical patient, cesarean section is done when indicated for obstetrical reasons. Approximately 70 to 80 per cent of all cases of myomectomies who went to term were delivered vaginally in other series. At the St. Dominic's Hospital 70 per cent of the patients with myomectomies who went to term had cesarean sections. At the Baptist Hospital, four patients went to term, three were delivered vaginally (one had a set of twins) and one by cesarean section.

Most of the authors of the articles reviewed feel that there is little chance of rupture of the uterus during pregnancy in the patients who had myomectomies. Pedowitz[6] in 1958 stated that in reviewing the literature he could find only 47 cases of rupture of the uterus following myomectomy.

In patients who have had myomectomies, what is the outlook for further surgery on the uterus? Brown,[1] in his series, found that in the cases of myomectomies which were followed two years or more, 14.9 per cent ended up with a hysterectomy, and if followed for five years or more, 16.5 per cent had a hysterectomy. In his series, one patient requiring hysterectomy was found to have a leiomyosarcoma. At the St. Dominic's Hospital, five of the patients later had a hysterectomy. One patient, a 36-year-old white female, was found to have a leiomyosarcoma in two of the three myomas removed. Five days later a total abdominal hysterectomy was done. At the Mississippi Baptist Hospital, following myomectomy, six had D & C's and three had a total abdominal hysterectomy.

The following case reports are presented for illustration:

CASE REPORT 1

T. L., a 29-year-old white female, had multiple myomectomies done on Oct. 9, 1957. She was known to have had leiomyomas for approximately two years and bled so profusely with each menstrual period that her hemoglobin was around 8 gm. She refused to have anything done until she had married. Following marriage, contraceptives were used for two months and after six months of attempting to get pregnant without success, she asked for surgery. Three myomas were removed, two from the posterior surface of the uterus and one from the anterior surface. The largest measured 8.5 x 6.0 x 5.4 cm. The endometrial cavity was entered during the procedure and following myomectomy an appendectomy was done. At the six weeks check-up she was advised to resume intercourse and attempt to get pregnant. Her last menstrual period was on Dec. 15, 1957, and she was delivered of a living male weighing 7 lbs. 9 oz. on Sept. 9, 1958. She has since had two other children, all of which were delivered by cesarean section.

CASE REPORT 2

A. W., a 26-year-old colored female, was first seen by the referring doctor in September 1961 for irregular bleeding. She had questionably spontaneously aborted in 1959 and 1960. A D & C was done in September 1961 because of irregular bleeding and at that time the uterus was described as being enlarged to the size of an eight weeks' pregnancy. It was nodular and deviated to the right. Following the D & C she continued to bleed irregularly and was placed on Enovid in an attempt to control it but without success. A myomectory was done on March 7, 1962. A six cm. myoma was removed from the anterior surface of the uterus and a four cm. myoma and a two cm. myoma were removed posteriorly. Her last menstrual period following surgery was on June 5, 1962. I first saw her August 27, 1962, and she was delivered by cesarean section on March 5, 1963. Both the patient and infant were discharged from the hospital in good condition.

CASE REPORT 3

E. O., a 30-year-old colored female, Gravida 1, Para 0, was first seen on June 24, 1959, when ten weeks pregnant. Shortly thereafter, while visiting in Alabama, she spontaneously aborted and a D & C was done. Two large uterine fibroids were palpated on the fundus. A month later, Sept. 28, 1959, a myomectomy was done and two fibroids, described by her physician as the size of oranges, were excised from the anterior wall. The uterine cavity was entered twice. Following this, her menstrual periods were regular until March 26, 1960. I saw her prenatally and again she returned to Alabama for her delivery which was by cesarean section performed Dec. 27, 1960. I last examined her on May 28, 1963 and the uterus was only slightly enlarged.

CASE REPORT 4

L. R., a 32-year-old colored female, Gravida 0, had a D & C, an abdominal myomectomy, and an appendectomy on Nov. 25, 1958. The uterine cavity was not entered during the procedure. I saw her in the fall of 1961, and she stated her last menstrual period was July 4, 1961. She had an uneventful pregnancy and gave birth to a 7 lb. 13 oz. male vaginally, April 7, 1962. Delivery was accomplished with low forceps and midline episiotomy. The uterus was explored and no abnormality was noted. She had a labor of seven hours.

CASE REPORT 5

B. C., a 25-year-old colored female, was first seen Dec. 7, 1962, stating she had only been married a few months and was using suppositories for contraception. She had a large abdominal mass which extended half-way to the umbil-

icus on the left and to the umbilicus on the right. It was hard, firm and nodular. On Dec. 21, 1962, I removed a multi-nodular tumor mass measuring 11 x 10 x 7 cm. and also did an appendectomy. She continued to use contraceptive suppositories and came to the office in July of 1963, stating she last menstruated May 3, 1963. She had no complications and delivered a 6 lb. 5 oz. female by cesarean section. At that time the uterine scar was extremely thin.

In conclusion then, I would like to recommend myomectomy in any woman who has fibroids requiring surgery if they are under the age of 42 and desire children. If, however, the tubes are diseased or there is no chance the patient will become pregnant, then I feel that a hysterectomy should be done. In women who have had myomectomies there is approximately a 30 per cent chance of pregnancy and of the pregnancy going to term. Approximately 15 per cent will have recurrent symptoms severe enough for a hysterectomy within five years. While rare, occasionally sarcomatous changes will be found in the myomas removed. ★★★

500-G East Woodrow Wilson Dr.

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ALL IN HER MIND

A New York apartment house caught fire one night and the tenants rushed out into the street carrying their most prized possessions. One woman noticed that the man who lived directly above her was carrying a large covered birdcage.

"What have you got there?" she asked.

"That's my pet rooster," said the man—and the woman fainted dead away.

When she was revived, she explained to her neighbors, "I'm sorry—but you see for the past year I've been under the care of a psychiatrist—because I kept hearing a rooster crowing!"

Diabetes Mellitus and the Public Health

ALTON B. COBB, M.D., M.P.H.
Jackson, Mississippi

DIABETES MELLITUS is a public health problem of sizeable magnitude. Survey studies have revealed a probable prevalence of diabetes as shown in Table I.

TABLE I

ESTIMATED PREVALENCE RATE PER 1,000 POPULATION KNOWN AND UNSUSPECTED DIABETES BY AGE, UNITED STATES, 1959[1]

Age	*Known Cases*	*Unsuspected Cases*	*Total*
All ages	9.0	8.1	17.1
Under 25	0.9	0.7	1.6
25-44	4.4	5.2	9.6
45-54	12.4	17.9	30.3
55-64	28.4	24.2	52.6
65-74	42.9	26.2	69.1
75 and over	35.6	25.4	60.1

In view of the relatively high prevalence of this chronic disease in older people, combined with the rapid increase in population of these ages, a substantial rise in the prevalence of this condition may be expected in the next few years. In addition, it is important to observe the significant proportion of unsuspected to known cases in each age group, particularly for the period 25-54 years in which the estimated prevalence of unsuspected cases exceeds the known cases. Using the rates in the above table, it is estimated that there are approximately 18,500 known cases in Mississippi and 16,400 unsuspected cases, making a total of 34,900 cases.

This disease was assigned as the cause of death for 306 persons in Mississippi during 1962. The death rate was 13.6 per 100,000 population, and diabetes ranked eighth among the leading causes of death. Authorities have pointed out, however, that diabetes is an important contributory cause in many deaths assigned to cardiovascular-renal and other diseases. Considering the importance of this disease as a contributory cause of death, the ranking of eighth fails to adequately reflect the seriousness of this condition as a cause of death.

It is estimated that there are approximately 18,500 known cases of diabetes mellitus in Mississippi and 16,400 unsuspected cases, making a total of 34,900 cases. The author, who is director of the Division of Chronic Illness Services, Mississippi State Board of Health, discusses the division's three-pronged diabetic program and concludes with a detailed consideration of case finding through screening of high risk groups.

Diabetes mellitus is a major cause of disability. It ranks as the third leading cause of blindness, and the National Health Survey[2] revealed that the average number of days of disability for diabetes was almost twice that for a nondiabetic control group matched for age, sex, race, and other factors.

On June 1, 1962, the Mississippi State Board of Health, in cooperation with 82 county health departments, began a public health diabetic program including three major approaches to this problem. These approaches are:

1. Case finding through screening of high risk groups.
2. Patient and public education.

From the Division of Chronic Illness Services, Mississippi State Board of Health.

3. Patient services to supplement and extend private physician care.

The remainder of this report will be devoted to the case finding or screening program.

CASE FINDING

Venous blood specimens are collected in a vacuum tube containing sodium fluoride as an anticoagulant and preservative. These specimens have been collected in the main from persons visiting health department clinics for other services. The specimens are mailed to the State Health Department Laboratory where they are processed on the clinitron, an automated device employing the Wilkerson-Heftmann method for measuring *true blood glucose.* All specimens showing a level of 130 mg. per cent true glucose or above are read as positive and all those below this level are read as negative. All subjects read positive on the initial test are requested to return for a retest at one to two hours after a typical meal. All persons screening positive on the retest are referred to their private physician for diagnostic evaluation. Studies have shown that, at the stated screening level and time interval since last meal, the estimated sensitivity of this test procedure is about 80 per cent with a specificity of approximately 90 per cent. This is several times the probable sensitivity of urine screening for case finding.

The object of this screening procedure is the application of a relatively simple test to a large number of persons to attempt an identification of those persons who are most in need of diagnostic evaluation by private physicians for diabetes mellitus.

It has been demonstrated that certain reasonably well-identified groups have a much higher expected prevalence for diabetes than the general population. As shown by the data in Table II, age alone can be a good method of selecting those to be screened. The percentage of new cases found increased with age except for the 55-64 year group.

Considerable survey work has been done which permits further specific definition by population characteristics for increased expected prevalence of diabetes. Some of these high risk groups for presence or development of diabetes are as follows:

1. Blood relatives of known diabetics.
2. Persons with other chronic diseases, such as tuberculosis.
3. Women who have given birth to large babies (over 9 lbs.).
4. Persons over 40 and overweight.

In order to estimate probable yield of previously unknown diabetics among certain groups available for screening, local health department personnel, after interviewing a prospective screenee, selected and entered on the screening form what they considered to be the primary reason for taking the test. The screenee could be in one of the high risk groups outlined above, or in one of a number of other groups such as food handlers, routine maternity cases, and premaritals who receive services from local health departments, or in a special group to whom the screening program was extended. It is recognized, however, that these groups are not mutually exclusive and a problem therefore exists in classifying reason for screening. The results of screening by reason are shown in Table III.

TABLE II

NUMBER OF PERSONS SCREENED FOR DIABETES, NEW CASES, AND PER CENT OF PERSONS SCREENED WHO ARE NEW CASES, BY AGE
MISSISSIPPI
JANUARY-JUNE, 1963

Age	*Total Screened*	*New Cases**	*Per Cent New Cases*
Total	12,285	103	0.8
Under 25	4,609	4	0.1
25-44	4,280	19	0.4
45-54	1,499	33	2.2
55-64	1,103	21	1.9
65-74	524	15	2.9
75 and over	252	11	4.4
Unknown	18	0	—

* Includes 18 borderline cases.

The relatively high new case yield for several of the groups seems significant. The highest yield was among nursing home patients. In view of the age and general health status of these people, this yield is not surprising. The other two most productive groups were "private physician referrals" and "over 40 and overweight." As one would expect, persons with other chronic diseases and blood relatives of known diabetics proved to be good groups for screening.

Again, it is well recognized that the groups are not mutually exclusive and this information is only intended to serve as a guide for planning community screening programs. It is hoped that

TABLE III

NUMBER OF PERSONS SCREENED FOR DIABETES MELLITUS, NEW CASES, AND PER CENT OF PERSONS SCREENED WHO ARE NEW CASES BY SELECTED REASON FOR SCREENING
MISSISSIPPI
JANUARY-JUNE, 1963

Reason for Screening	*Total Screened*	*New Cases**	*Per Cent New Cases*
Blood relatives	1,434	20	1.4
Other chronic diseases	234	4	1.7
Maternity complications	834	5	0.6
Over 40 and overweight	453	17	3.8
Routine maternity	2,662	2	0.1
Premarital	1,287	3	0.2
Foodhandler	1,329	4	0.3
Routine VD	229	3	1.3
Home Demonstration Clubs	1,102	11	1.0
Private physician referral	102	4	3.9
Nursing home patients	186	9	4.8
Other (midwives, industrial groups, etc.)	2,433	21	0.9
Total	12,285	103	0.8

* Includes 18 borderline cases.

private physicians will, in the future, perform a blood sugar test on more of the patients they consider as high risks for diabetes mellitus.

SUMMARY

Diabetes is a major chronic disease problem in our population. This report summarizes our experience with a blood sugar screening program directed mainly at identifiable groups seen in health departments for other services. These data indicate that a screening program will be more efficient if priority for testing is given the higher yield groups. Age and other characteristics may serve as criteria for establishing testing priority.

Private physician testing will no doubt prove to be one of the most productive approaches for finding previously undiagnosed diabetics. Any Mississippi physician may obtain the necessary tubes and laboratory data slips for blood sugar screening from his county health department. ★★★

2423 North State St.

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Editor's Note: This is a summary report. A more detailed report is available on request from the author.

SPOTTED SPOUSE

A leopard walked into the psychiatrist's office and complained that every time he looked at his wife he saw spots in front of his eyes.

"So what's abnormal about that?" asked the puzzled physician.

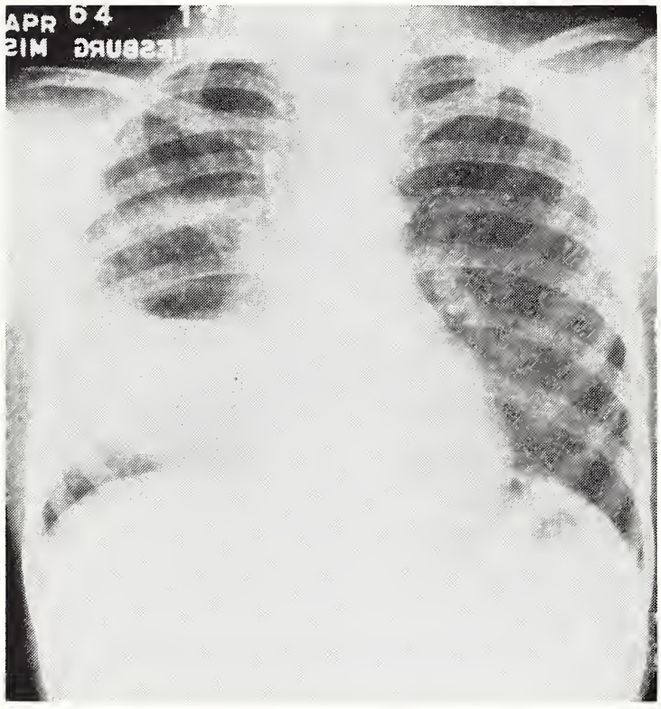
"But, doctor," explained the leopard, "I'm married to a zebra."

—Kay Stevens in *Parade*

Radiologic Seminar XXVII: Lung Abscess

CARL R. HALE, M.D.
Hattiesburg, Mississippi

A PULMONARY ABSCESS develops when an area of pneumonitis undergoes gross suppuration and central necrosis. A variety of bacterial organisms may be involved in the development of an abscess, the main requirement being their capacity to cause tissue breakdown. Anaerobes including the fusiform bacilli and spirochetes are frequently found, as are the Staphylococcus, Streptococcus and Friedlander bacillus. By convention the cavitary lesion of tuberculosis is not called an abscess. Those lung abscesses secondary to aspiration are most common in the posterior portions of the lungs, specifically the apical portions of the lower lobes and the posterior segments of the upper lobes. The right side is more commonly involved than the left, due to the anatomical relationship of the right main stem bronchus to the trachea. Abscesses developing in or distal to a bronchogenic carcinoma have their location governed by the site of the primary neoplastic process.



Figures 1A and B. PA and lateral chest films reveal a classical cavitary lesion in the right lower lobe. The inflammatory lesion has fairly well defined borders, with the upper portion of the cavity being filled with air, the lower part with fluid and exudate.

To make a radiologic diagnosis of lung abscess the central cavity must contain enough air to permit a density differential between it and the inflammatory reaction in the wall and surrounding lung parenchyma. In the early stages of the development of an abscess, before the necrotic contents are partially evacuated through a bronchus,

Figure 1B.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Forrest County General Hospital.

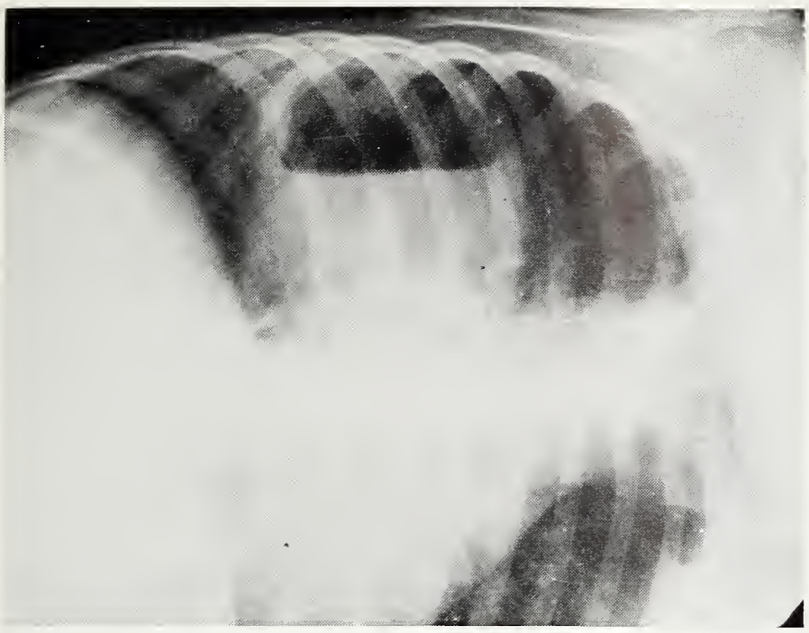


Figure 2. A lateral decubitus view demonstrates the air-fluid level in the cavity to good advantage.

Figure 3. A chest film 25 days later, showing marked improvement under conservative medical therapy.

one may demonstrate only an area of consolidation on a chest film. Likewise, if the cavity should be completely filled with exudate and fluid, it would not be apparent, and in any given cavity the proportions of air and fluid may vary from day to day. In the classical acute lung abscess, however, one is able to outline the lumen of the cavity by its contained air and fluid, as is well shown in the present case.

The patient is a six-year-old, white male whose father sought medical aid for him, since the youngster did not recover from measles as did his siblings. Instead, his fever persisted and he developed a frequent cough. Examination revealed a febrile, dyspneic, acutely ill child coughing constantly and unproductively. There were rales on the right associated with decreased breath sounds.

Figure 1A reveals an area of opacification with a radiolucent shadow at its superior border suggesting a cavity. The lateral projection (Figure 1B) proves that the lesion is spherical rather than flat, and a lateral decubitus horizontal beam PA film (Figure 2) confirms the presence of an air-fluid level within the cavity. Figure 3, a chest film taken 25 days after the initial film, reveals marked reduction of size of the cavity and decreased thickness of its walls.

Acute lung abscesses may heal under a vigorous conservative medical therapy regime, but these cases must be carefully followed with serial radiographs until there is evidence of complete healing. Many abscesses will show marked improvement with medical therapy, but not complete healing, and here surgical intervention is indicated when what appears to be the maximum benefit has been obtained. In the adult with an abscess cavity, one must always keep in mind the possibility of an underlying bronchogenic neoplasm. ★★★

Clinicopathological Conference LIV

Conducted by the Department of Pathology
Mississippi Baptist Hospital
Jackson, Mississippi

A 43-YEAR-OLD WHITE WOMAN was admitted to the Mississippi Baptist Hospital on Jan. 15, 1964, with a chief complaint of abdominal pain. During the past 16 months the patient had been suffering from a good deal of abdominal distention, bloating, belching, and flatulence accompanied by postprandial upper abdominal fullness and sour regurgitation. She had no ulcer type pain or ulcer type rhythm and had no ulcer type complications. She had qualitative dyspepsia for highly seasoned and greasy foods. She had no jaundice or colic and no fever, chills, or night sweats. During this time interval, she had a moderate amount of bowel irregularity. Her stools had been soft and yellowish, but she occasionally went a day or two without bowel movements. The patient denied any constipation or intervals of diarrhea. There had been no blood, pus, or mucus in the stools. She had lost approximately 15 pounds in weight.

In November 1963, the patient was in an automobile accident and was admitted to a hospital in the state near the site of accident. She mentioned the abdominal discomfort to the attending physician who did a GI series and reported that she had a peptic ulcer. She was placed on an ulcer type program without any benefit or relief of her symptoms. After discharge from that hospital she was admitted to a hospital in her home town. Here, repeated GI series revealed large, coarsened mucosal folds but no evidence of gastric or duodenal ulcer.

The patient had recently had a good deal of rather resistant peripheral edema which had not responded at all to diuretic medication. The patient also had recently had some kidney function studies, all of which had been entirely normal. She denied any type of urinary tract symptomatology or past history of renal disease. The patient was admitted to the Baptist Hospital for further study and possible gastroscopy, primarily to rule out a lymphoma.

Review of symptoms was entirely noncontributory except for the fact that the patient was found in 1961 to have psychomotor seizures, localizing from a right temporal focus. She had been on Dilantin and phenobarbital twice daily with relatively good control. Past history was noncontributory; she had had a hysterectomy for benign conditions several years before this admission.

In CPC LIV Dr. John W. Long discusses the case of a 43-year-old white woman admitted with a chief complaint of abdominal pain. During the 16 months prior to admission the patient had suffered from a good deal of abdominal distention, bloating, belching, and flatulence accompanied by postprandial upper abdominal fullness and sour regurgitation. Other discussers are Drs. Robert P. Henderson, Eugene J. Thomas, Louis Schiesari, Leonard Posey, Rush Netterville, and T. E. Wilson.

Physical examination revealed a well-developed, well-nourished white female in no acute distress with moderate "puffiness" of the face, hands, feet and presenting a 2+ peripheral edema up to the knees. The blood pressures were 130/80 in both arms. Head examination was negative. Neck examination revealed no enlarged glands or goiter. The heart was of normal size, sounds, and rhythm. The lungs were clear to percussion and auscultation. The abdomen was soft, nontender; no enlargement of liver, kidneys, or spleen was detected. Examination of the extremities revealed peripheral

edema; circulation, neurological examination, and vibratory sensation were normal. There was no evidence of any peripheral lymphadenopathy.

On urinalysis, the specific gravity was 1.025; albumin 2+; WBC 8-10 HPF, and there were no RBC's. Hemoglobin was 14.3 gm. per cent, hematocrit 42 vol., WBC 11,800 with 2 monocytes, 17 lymphocytes, 7 eosinophils, 56 segmenters, and 18 bands. Blood chemistry was as follows: amylase 42 units; total bilirubin 0.45 mg. per cent; calcium 7.25 mg. per cent; cholesterol 212 mg. per cent; glucose 98 mg. per cent, alkaline phosphatase 1.9 units; total protein 3.82 gm. per cent with 2.67 albumin and 1.15 globulin; urea nitrogen 11 mg. per cent.

X-ray of the chest and gallbladder were within normal limits. An upper GI series revealed marked thickening of the rugal pattern in the stomach with a cobblestone appearance. There was no evidence of rigidity of the stomach, and no specific narrowing could be identified. No ulcerations could be seen although the retained gastric secretions were noted. This gave the gastric mucosa a meaty or edematous appearance. The barium meal was followed through the small bowel without showing any abnormality in the small intestine. The motility pattern was normal. A barium enema revealed a few small diverticula in the ascending colon but no other abnormalities were identified. An operation was performed on Feb. 6, 1964.

X-RAY DATA

Dr. John W. Long: "I would like to see the the x-rays before going ahead."

Dr. Robert P. Henderson: "We are fortunate to have several examinations over an interval of time on this patient because the radiographic findings are not absolutely diagnostic in this case. There are features of the process which are relatively characteristic. For example, on all of the studies that are available it is evident that there are retained gastric secretions which tend to dilute the barium and cause a somewhat granular appearance from the films. Also, it is evident from the multiple films that there is no rigidity to any portion of the stomach and that the stomach is relatively distensible. The involvement of the entire stomach with the greater curvature showing the most pronounced involvement also should be noted. Dr. Louis Chatham of Yazoo City has kindly given us permission to use his films. Thickening of the rugal pattern with mild cobblestone appearance is noted throughout the stomach. Also, it is evident from this film that there are retained gastric secretions giving it a somewhat granular appearance particularly noted in the upper body of the stomach. The rugal pattern can best be

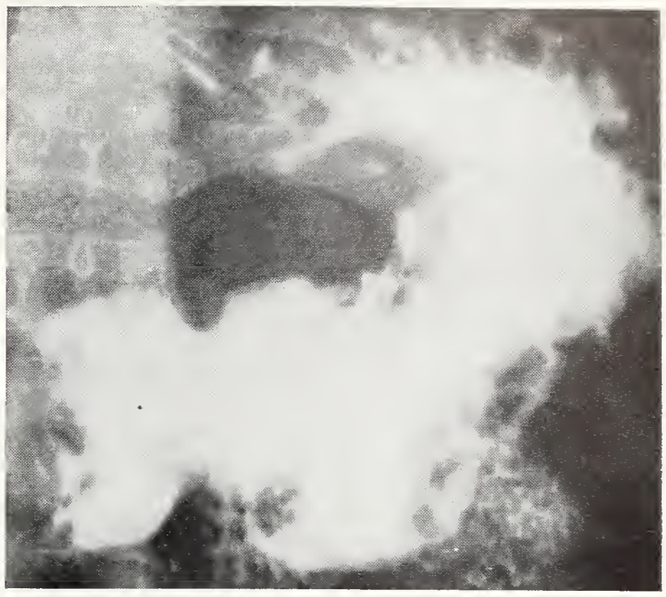


Figure 1

described as having a 'meaty' appearance rather than a rigid infiltrative type of process (Figure 1)."

DIFFERENTIAL DIAGNOSIS

Dr. Long: "As I see this case, the differential diagnosis is between several things. I think the best diagnosis would be diffuse giant hypertrophic gastritis or Menetrier's disease. It's the fellow's name who described it way back in 1888. It took me a long time to see one of those. I had one of them about two or three years ago, but he described it way back yonder. Of course, the next thing would be just a plain hypertrophic gastritis which doesn't quite fit the same picture as the giant hypertrophic gastritis (Menetrier's disease). That would be two diagnoses to consider. The third would be a lymphosarcoma; that possible diagnosis was even given in the protocol. The author said gastroscopy was considered to rule out a lymphosarcoma. The next diagnosis would be, of course, a carcinoma of the stomach with enlarged folds which is certainly a possibility in this case. With a picture like that, I don't think anybody could say definitely it isn't carcinoma of the stomach, although it is not the characteristic thing. Might ask this bunch of surgeons around if lately they have seen a case of cancer of the stomach. I haven't and the radiologists haven't seen many of them. Dr. Harvey Johnston told me he saw one recently that was a galloping case and that's the only patient I've heard about lately. So the decrease in incidence would be against that argument.

"Essentially though, we have a syndrome here that I think points to the diagnosis. One, is that we do have the giant hypertrophic gastric folds. The second thing is we have a pain pattern, epigastric pain, discomfort, fullness, some regurgitation and so forth, maybe even some of retention type vomiting or it gives you the idea that she might have had a little of that. The stomach was not emptying well as you can see gastric secretions. The third thing which is very important in my opinion is that we have a very low serum protein. It was only 3.82 gm. per cent, and if the internists will correct me on this, I believe that below 4.5 you start getting edema. Isn't that your critical level of edema, 4.5 gm.? Of course, that would depend a little bit on what the albumin and globulin ratio is, but I believe anytime you get down below 4.5 you can start getting edema. So she was well below the edema level and that could account for the peripheral edema this woman had which did not clear up on diuretics. They were unable to control it by that means.

"She had no evidence of heart disease and nothing in the way of a kidney disease except for a 2+ albuminuria. This is the first time it is mentioned that she even had any albuminuria. I doubt if a 2+ albuminuria in probably a specimen like this with some pus cells in it means anything so it is most likely related to pus cells. She did not have small bowel x-ray pattern of malabsorption syndrome to account for her low protein. She did not have that bad a digestive upset to lose that much protein, and I can't figure out any other way she's lost so much protein except that the stomach has discharged serum protein into the lumen of the bowel. When you look up the etiology of protein losing enteropathies, and you have a good many of them, this particular disease that we are talking about now fits into that. That's a rather interesting thing to me. You have the protein apparently lost into bowel lumen in this particular disease we are talking about, Menetrier's disease. There is a lot of mucus and secretions in the stomach, and I suppose a lot of that is protein. Maybe that's where the protein goes. Carcinoma of the stomach, of course, could do the same thing. You could have a lot of loss of protein and blood and proteins can get down that low.

"Consider now her low calcium. As far as I am concerned, I would say that the low calcium figure is due to the low protein. That is, this is a total calcium, this is not ionic calcium. With a calcium that low you would think that a patient might get some hypocalcemic symptoms. However, a protein that low would probably account for the low total calcium. She wouldn't have had symptoms because she had a normal ionic calcium. That would be my explanation anyway.

"The other thing is she had an eosinophilia and in this giant hypertrophic gastritis sometimes that's found and also a lot of eosinophils are found in the tissue. I cannot definitely rule out lymphosarcoma by any means. If a gastroscopy was performed, which this protocol doesn't say, and a biopsy was obtained, I'm not sure whether you can rule out lymphosarcoma that way or not. She did not have peripheral adenopathy. She didn't have fever. She didn't have several other things, although I cannot rule it out completely at all. I don't think lymphosarcoma of the stomach and the low protein go along together, in fact, as far as I know, low protein is not characteristic of lymphosarcoma of the stomach. Certainly when we say we can't rule out cancer of the stomach, I don't believe Dr. Henderson would ever call this an ordinary carcinomatous infiltration of the stomach. He said it was flexible, the walls were flexible, and peristalsis was present so that is against cancer of the stomach. I don't think it does rule out lymphosarcoma of the stomach, though.

"So I'm going to stick to the diagnosis of giant hypertrophic gastritis due to the fact that she had the pain that is associated with it, the discomfort, she had had some vomiting, she had some weight loss, and she had hypoalbuminemia with peripheral edema which was due to the low proteins, in my opinion."

PARATHYROID DISEASE

Dr. Eugene J. Thomas: "Did you consider parathyroid disease?"

Dr. Long: "Parathyroid disease, so far as I know, wouldn't account for this situation at all. A low serum calcium is not always significant, because the value refers to total calcium and this is dependent in part on the level of serum proteins. A low calcium may be due to low proteins and a high calcium may be due to high serum proteins. Also symptoms due to low calcium are due to ionic calcium depression. Now, she did have some psychomotor seizures which were controlled on Dilantin, and I assume that the seizures were on this basis and not on low calcium although as I say I can't be one hundred per cent sure. We only have one calcium report. A low calcium report in

any laboratory calls for a repeat of the test before you can depend on it."

PATHOLOGIST'S REPORT

Dr. Louis Schiesari: "The mucosa folds were high and wide, crowded together like cerebral convolutions and separated by deep narrow clefts. They were diffusely enlarged from one end to the other, showing some branching and anastomosing but in general their axis tended to be parallel to the long axis of the stomach. There was a distinct pebblestone effect to the gastric mucosa in between the giant rugae (Figure 2). Cross sections

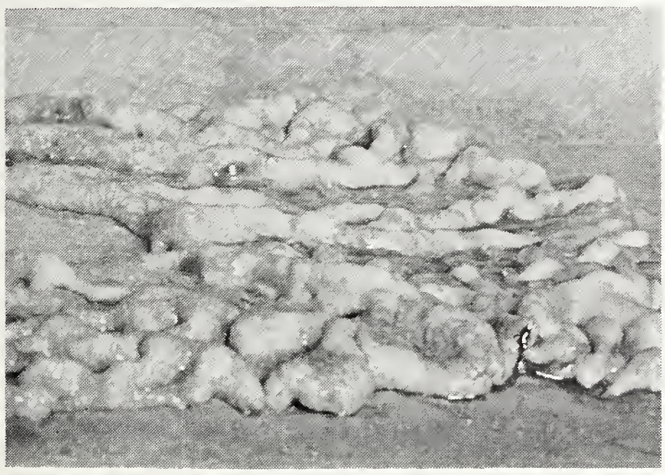


Figure 2

revealed that these hypertrophic rugae were supported by a thick, soft submucosa and that they were freely movable over the underlying muscular wall which was not altered (Figure 3). Microscopically, the rugae were composed of greatly elongated glands, straight or tortuous. The mucous, chief, and parietal cells were normal in distribution and staining reaction. A few cystic dilatations were noted in the basilar portion. The inflammatory reaction was minimal and composed

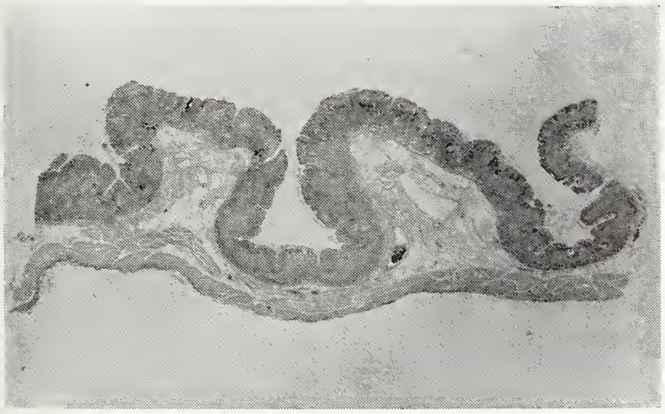


Figure 3

of a mixture of lymphocytes and plasma cells with a sprinkling of eosinophils. The submucosa was edematous with increased vascularity.

"This peculiar condition, which is better known for its exotic names than for its incidence, was first described by Menetrier in 1888 under the term polyadénomes en nappe. Since nappe in French means table cloth, I presume that the author meant a crimpled table cloth. It is now commonly called Menetrier's disease or giant hypertrophic gastritis. The causes of this disease are unknown. In a series of 20 cases from the Mayo Clinic, multiple endocrine adenomas were found in three patients; but whether this is a mere coincidence or a true relationship between cause and effect remains to be demonstrated. This was Dr. Rush Netterville's case and Dr. Leonard Posey was the consultant. We would like to hear from both of them."

A CLASSIC CASE

Dr. Leonard Posey: "I didn't know until now that I was supposed to discuss this case. My remarks may be just a bit disjointed. This case was classical, I felt, of Menetrier's disease. The patient's symptoms, the x-ray findings, the fact that the patient had marked hypoproteinemia with a profound depression of albumin is quite characteristic. I don't believe the protocol included the finding of a histamine-fast achlorhydria, which also goes along with the diagnosis. I did a gastric biopsy on this woman which revealed a great deal of atrophy as far as the mucosa itself is concerned. It seems rather odd that a person with a stomach in which the mucosa was so tremendously engorged, enfolded, swollen, and convoluted would have an atrophy of the mucosa, but that actually takes place in this particular disease and is quite characteristic of it. It may be that the gastric atrophy is the precursor of carcinomatous change, which has been reported in Menetrier's disease. I would agree with Dr. Long that the hypocalcemia was related to the hypoproteinemia and was probably more apparent than real. For what it's worth, since this woman has been operated on, her calcium is now entirely normal and her serum proteins are entirely normal, six weeks post-op. She has lost all of her edema. We had her leave off her Dilantin and phenobarbital and got a repeat electroencephalogram on her. She still has the cerebral dysrhythmia which indicates that the hypocalcemia had nothing to do with her seizures. We were hoping that there might perhaps be some relationship, but there was not.

"The mechanism of the hypoproteinemia which these individuals develop is rather interesting. Of

course, protein that exudes into the gastrointestinal tract from any disease process actually goes through the same digestive cycle as exogenous protein; these substances are broken down to polypeptides and aminoacids are absorbed by the small bowel mucosa and transported back into the system again. If this disease process is producing a hypoproteinemia and the proteins are digested and reabsorbed, what is the mechanism? This problem has caused considerable speculation and investigation in several different quarters over the past six or eight years. Out of these studies the idea of the so-called protein losing gastroenteropathies has been derived. At the present time we do know that Menetrier's disease is an integral part of this state, and that this may occur with or without disease of the small intestine. With the associated small intestinal disease there may be an outpouring of protein material particularly rich in albumin into the lumen. The problem has been investigated first with polyvinylpyrrolinodone (PVP) and more recently by the use of radioactive albumin. In individuals with Menetrier's disease, for example, if the radioactive albumin is given intravenously, it can be picked up from the gastric lumen. Later on it can be picked up from the lumen of the small intestine and then found to recirculate once more.

"There are a large number of diseases of the small intestine that are associated with protein exudation. There is no one specific disease except for lymphangiectasia of the small bowel. All others exhibit the protein loss as a secondary phenomenon. Dr. John Carbone from California has followed a large number of these people over a good long period of time and has found that many end up showing either regional enteritis or Whipple's disease or occasionally lymphoma; rarely they are ultimately demonstrated to have a malabsorption syndrome.

"The mechanism of the hypoproteinemia, as understood at the present time, is that although the protein is lost by exudation, it is digested and reabsorbed. The anabolic function of the liver is ultimately overwhelmed by the demand for increasingly large amounts of albumin. This anabolic function is not capable of compensating for the lowering level of the serum albumin that eventuated from the loss of the protein. Therefore, it is not a phenomenon of hypercatabolism as was originally thought but is one of relative hypoanabolism.

"There has been no specific treatment that has been developed for this disorder in any shape, form, or fashion. The best therapy that has yet been devised is as near a total gastric resection as can be done, leaving a gastric remnant to serve as a hopper to try to reduce the incidence of the postgastrectomy syndrome and generalized malnutrition that would take place. The majority of individuals who do have a massive near-total gastric resection with this disease do extremely well indeed. This woman has done so. We could not ask for more improvement than she has had since her operation."

Dr. Long: "I want to ask you a question. Did you give her any kind of albumin or anything beforehand to try to bring up her protein?"

Dr. Posey: "She got some immediately prior to the surgery but that's all. It didn't work. She got some before the operation in the hope it would cut down some on the anastomotic edema."

Dr. Long: "That's the only thing I was worried about."

Dr. Posey: "But you cannot maintain a person's serum albumin level."

Dr. Long: "No, I mean just before surgery; how much was given?"

Dr. Rush Netterville: "I think we gave her 50 gm."

STEROIDS

Dr. T. E. Wilson: "Have steroids been tried?"

Dr. Posey: "Steroids have been tried with absolutely no benefit whatsoever. I am not aware of anyone who has tried irradiation. I would not think that it would be of any value because all irradiation does is produce a good deal of gastric atrophy. She already had a completely atrophic gastric mucosa to start off with. Therefore, it would be much safer, I believe, to do the gastric resection."

Dr. Long: "But this doesn't always involve all the stomach."

Dr. Posey: "It will ultimately."

Dr. Long: "It might. What if you saw one with, say, half the stomach involved, wouldn't you just take out the involved portion and leave the other."

Dr. Posey: "If you do this, you're going to have to go back in and take out the rest of it later. Dr. Netterville had the stomach open, he can tell you about that accurately. These people have such a tremendously engorged hyperemic, edematous, boggy mucosa that this in itself actually is a constant drag on the stomach. Any distending force or any peristaltic wave moving through there will only produce additional tension on the wall. I am sure that is what would be responsible for the pain. She had absolutely no peptic ulcer manifestations, whatsoever. The abdominal discomfort consisted primarily of postprandial epigastric full-

ness and persistent heaviness in the upper abdomen and gradual loss of weight and gradual progression of the peripheral edema. Those are the usual symptoms when the disease is limited entirely to the stomach. Of course, if there is small bowel disease then they may have small bowel symptoms along with it."

SURGEON'S REPORT

Dr. Long: "Dr. Netterville, what did you do?"

Dr. Netterville: "In the first place I was concerned about the low serum albumin and the effect this would have on healing. As you recall her admission serum albumin was 2.67 gm. per cent. She was given serum albumin 12.5 gm. intravenously daily in addition to the regular diet by mouth. The total protein the day of surgery was 4.72 with an albumin of 3.06 gm. per cent. At surgery the entire stomach was much thicker than normal. All the stomach was involved by this process. The distal 75 per cent of the stomach was resected. Because of the edema of the stomach a larger anastomosis between the stomach and jejunum than normal was made to prevent obstruction of the anastomosis. When the patient left the hospital, her serum proteins were normal."

Dr. Long: "These tests for proteins you're talking about—I ran upon an article that said they'd lose up to 8 gm. a day."

Dr. Netterville: "One thing that was interesting to me that I forgot to mention was the constant secretion of mucus from the gastric mucosa that was observed at surgery. A Levine tube was placed in the stomach before surgery and during the entire operation there was a constant drip of thick mucus from the tube." ★★★

1190 North State St.

TIME TO RETIRE

A respected general practitioner in a rural community was preparing for retirement after 40 years of practice. It was generally known that he had half a million dollars, despite his having cheerfully cared for those who could not or did not pay and having charged modest fees. Asked how he amassed his fortune, he replied:

"I owe what worldly substance I have to being scrupulously honest, diligent in the care of my patients, thoroughly dedicated to my profession, and to my late uncle who left me $498,000."

SPECIAL ARTICLE

The Federal Dollar: Eagle With a Hundred Talons

JOHN G. ARCHER, M.D.
Greenville, Mississippi

Emphasizing the enormity of the impact of federal funds upon teaching and research, Dr. John G. Archer, in his presidential address, says that a substantial segment of the American medical scientific community seems to have resigned itself to the belief that only the federal government can finance its ongoing activities. The repositioning of research in the private sector with voluntary correlation by scientific disciplines is proposed. The author asks for elimination of pork barrel politics in scientific research.

THE FORWARD THRUST of medical science in the 20th century has many meanings. For nearly everyone, it brings the gift of added years. It represents victory over many disease entities. It has permitted us to correct some of nature's mistakes in congenital anomalies. It means that we can do more in repairing the ravages of age as well as trauma. We have learned much about the mind and the body and, indeed, the processes of life itself. We are even approaching the day when diseased or injured vital organs may be replaced by transplantation.

UNBELIEVABLE PROGRESS

Concomitant advances in biochemistry and pharmacology, ingeniously interpreted by the pharmaceutical industry, have placed at the physician's disposal an unparalleled array of versatile and potent agents with which to combat disease. The mechanical, electronic, and physical aspects of medicine have penetrated deeply into new areas of discovery and understanding through achievement in the engineering and physical sciences. Allied disciplines have brought forward new and useful technics. There has been unbelievable progress in medical facilities design and construction.

Within this vast complex of compassion and science, still another field of endeavor has emerged through which these blessings and benefits are often conveyed. These are the economic and social aspects in which a quiet, orderly revolution has taken place. The phenomenon of the century is the mushrooming growth of voluntary health insurance and prepayment, almost unique in the United States. Despite the world trend toward government-provided medical services, the voluntary financing mechanism has not merely matched the progress of science in America, it has also become a model of private enterprise.

Our several centers of learning and research in medicine have reached new plateaus of capability and capacity. The growing numbers of graduates are augmenting our professional ranks at a rate exceeding the growth of the general population. Nearly every field in the life sciences is being probed in extensive programs of research.

THE PAST—A PROLOGUE

The promise of the future is bright, although physicians recognize that the easy victories have been won, that the success of the past must be regarded as prologue to the vastly difficult challenges of tomorrow. It is within that sphere of challenge

President, Mississippi State Medical Association, 1963-64. Read before the House of Delegates, 96th Annual Session, Jackson, May 11-14, 1964.

and opportunity that I raise questions and express profound concern.

The price tag on progress is high. We should acknowledge, however, that there is no real comparison to be made between the expenditure of human energies and worldly resources and the value of the life thereby benefitted. One way or the other, the price will somehow be paid, but the choice as to the means of payment today could be crucial tomorrow. If we fail to understand either our challenge or our opportunities and how best we can meet the responsibilities of science, then we may have taken the first step away from the goals which are in sight.

By tacit common consent, a substantial segment of the American medical scientific community seems to have resigned itself to the belief that only the federal government can finance its ongoing activity in education, research, and the extension of care resources. In three decades of the New Deal, the Fair Deal, the no deal, and the New Frontier, the statutory means through which the government entered medical science has become immersed in a murky complex of departments, bureaus, and institutes. The studs and joists in the structure of federalism are regulation, control, directed purpose, and dollar dependency.

Even if we cannot in our time solve the problem, we also cannot be complacent about it. Admittedly, our choices are limited, but since the situation is partially of our own making, we must understand that we do have choices.

FEDERAL STRINGS

The impact of federal funds upon all fields of science has been enormous. There is much more to a federal dollar than a hundred cents. With it comes contingent obligations, because it must be used under circumstances acceptable to the grantor. In this specific connection, the American Medical Association has said this: "In recent years, it has not been unusual for agencies to invite proposals for (research) projects in specific areas. This practice has resulted, in part, from large governmental appropriations intended to assist in the development of specific areas. Under these circumstances, institutional growth is almost certain to be uneven and unbalanced."

Having postulated the effect, AMA concludes logically that "the extent to which sponsored programs may be promoting desirable changes in the emphasis on various disciplines and the extent to which they may be causing undesirable imbalance is debatable. For better or for worse, these changes are related to the pattern of financial support of medical education."

Representatives of medical schools who serve as members of AMA's Council on Medical Education concede that it is widely believed among medical faculties that academic promotion is more dependent on research accomplishments than on teaching skill. While such belief may be exaggerated, the council continues, there is no doubt that research ability and the related ability to obtain research grants are given very serious consideration in new appointments and promotions. The statement is concluded with this poignant assertion: "This emphasis on faculty research activities is surely related to the availability of research funds and the dependence of the medical school on them."

87TH CONGRESS

Through fiscal 1963, the record of the 87th Congress in this respect speaks eloquently of government in medical activities. About $5 billion was appropriated in 90 categories for federal medical expenditures. This is, at best, only part of the picture, because many appropriations do not earmark money, leaving the recipient agency free to devise its own distribution and bookkeeping system, to prescribe the circumstances under which funds will be expended, and to select both the grantee as well as the research project.

Most intimately involved at federal level are the U. S. Public Health Service, the National Institutes of Health, the Department of Health, Education, and Welfare, and the Veterans Administration. The medical pocketbook for these agencies approaches $4 billion a year, and this sum does not include disability payments under medical criteria made by HEW's Social Security Administration nor those of the VA which total $5.5 billion annually.

At least 40 per cent of all expenditures by U. S. medical schools are from federal sources. Nearly three-fourths of these federal dollars are for research, and AMA estimates that the total for 1962 exceeded $215 million and reached $270 million for 1963, once the final figures are known.

Research project grants make up the largest category of support offered by the U. S. Public Health Service. The range covers medicine, biology, dentistry, nursing, hospitals, and activities grouped under the category headings of environmental and community health. Within the year, large new federal programs have been initiated in mental health and retardation, following enactments by the Congress. A significant program of federal aid to medical education and research has also been enacted. In his health message to the Second Session of the 88th Congress, Presi-

dent Johnson proposed both new and expanded federal medical programs which are at this moment pending in the national legislative halls.

Our federal research funds find their way to foreign shores, too. The United Nations receives U. S. support for the World Health Organization and UNICEF. The U. S. Public Health Service regularly makes funds available to institutions and scientists in other countries. Perhaps greater amounts go out unearmarked as such in foreign aid.

But federal subsidy of medical research is only a drop in the scientific pork barrel. A recent study showed that research in all American industry is 56 per cent federally financed. Aerospace research is highest on the hog with 85 per cent, and the electronics industry is close behind with 69 per cent. One American industry—a partner of medicine—stands out as a sort of last bastion of private responsibility: The American pharmaceutical industry's research is 98 per cent privately financed! And only one compound or chemical entity out of each 2,500 investigated ever reaches the druggist's shelves and the physician's office. Surely, there's a lesson to be learned here.

MORE BANG PER BUCK

I believe that my concern is valid and solidly grounded. I suggest that while research in any area is an indispensable means, it can also be a worthless end. I suggest that there is a popular fallacy among some scientists and nonscientists alike that only lavishly financed research can succeed. Yet, Fleming cultured the first penicillin mold with a penny's worth of agar.

I believe that we should seek more bang for a buck, not more bucks for a bang.

We have been called the affluent society, the waste makers, and even the ugly American. We have smiled at the charges, and while we complain about taxes, we seem to take a not-so-secret pride about national wealth. I suggest that we are not quite that wealthy and that we are kidding nobody but ourselves if we excuse waste because of wealth. The feeling that there's more where that comes from is as out of date as a buckboard at a drag race.

As practicing physicians with patient care responsibilities, we are greatly dependent upon the scientist in the laboratory. By no means is my concern to be construed as an indictment of research. I do not suggest that we eliminate rabies by killing all the dogs in the world. What we must do is to regain our scientific senses. We want our quest for knowledge to be a worthy task as well as a productive one.

THE MANPOWER WASTE

Medical research must be repositioned in the private sector. It must be correlated voluntarily by disciplines and spheres of interest. Under our present subsidy system, I believe that when two investigators, working independently of each other, come up with the same result, there has been a 50 per cent waste of scientific manpower.

In voluntarily correlating our research efforts, it must have intelligent direction and be undertaken with capacity and promise. This criticizes no existing institution, investigator, or project, but it does get at the heart of the serious questions raised by the American Medical Association. I believe further that our research goals must be very clearly defined which is to say that the "think tank" is an extravagance which science can't afford.

Whether federal research subsidy continues in its present direction is something to be decided after we have reappraised our purposes and objectives and how we feel we can best attain them. But an initial step of fundamental necessity is getting research out of politics and to getting politics out of research. It is distressing to observe that a proposed $30 million Environmental Health Center has been the focus of a geographic squabble among the National Institutes of Health, and the states of North Carolina, Virginia, and Wisconsin for three years. The late President Kennedy backed public health officials in their proposed siting of the center at Bethesda. President Johnson is listening to other arguments.

There's a bitter political battle shaping up over the $60 million electronics research center which will be built for the National Aeronautics and Space Administration—just where is the issue. Senator Kennedy says it should be in Boston, but midwestern congressional delegations promise a fight if it is.

Other members of Congress complain that 10 of the nation's 2,100 colleges and universities are getting 40 per cent of federal research funds totaling nearly $1 billion. Astonishingly enough, both the National Science Foundation and National Institutes of Health are looking for grant projects among the second string institutions who have been unable to compete with the larger universities for the big money. NIH would like for Congress to bolster its $50 million a year research facilities construction program so that less well-

to-do medical schools might have a base upon which to build bigger programs.

Not only is this kind of politics incompatible with science, it's also wasteful of the resources of scientific manpower. Competition for research dollars does not necessarily connote competition among equally worthy research proposals. We simply cannot purchase progress in inverse ratio to dollar costs. To do so is to cast aside the real purpose for which science exists and to admit that the pork barrel is more important than the project.

The forward thrust of medical science in the 20th century has many meanings. Most are good, are heartening, are humane. Some are not and suggest a sickness of our time for which no laboratory can produce a cure. Let us resolve that this sickness shall not be fatal to the high goal of healing nor to the nation we love. ★★★

344 Arnold Ave.

TEENAGERS ON TOBACCO

Five members of the San Diego County Medical Society appeared before 1,600 Oceanside high school students to discuss smoking and health. Following the physicians' presentations, written questions were invited from the teenage audience. Most queries were intelligent requests for valid information, but the doctors are still chuckling over these:

"If you roal your own cigarettes, can you get cancer?"

"Is cancer more permanent in male or female?"

"How can you keep the filter from getting soggy?"

"By the time we all get cancer 25 years from now, how do you know they won't have an inexpensive cure for cancer?"

—*California Medical Association Newsletter*

The President Speaking

'That Other Network'

OMAR SIMMONS, M.D.
Newton, Mississippi

THE MEDICAL STORYLINE on television seems second in popularity only to the ubiquitous western, and most are accurately portrayed as to the goals and aspirations of the profession. The two top shows, "Dr. Kildare" and "Ben Casey," are consistently among the most popular, and the two based on psychiatric practice, "The Eleventh Hour" and "Breaking Point," are usually well-structured stories with professionally accurate technical aspects. But not so with CBS' soggy drama of Thursday evenings, "The Nurses," which chronicles the goings on in a hospital where physicians are incidental props.

But on May 28, CBS—the black and white network—showed its true colors as vividly as NBC's peacock when "The Nurses" became an hour-long vehicle for promotion of compulsory federal medical care for the aging under Social Security. The not-so-subtle endorsement is fairly consistent with history of this network's views on government medicine. In 1961, CBS produced a documentary film program which was little more than a thinly veiled endorsement of the then-pending version of King-Anderson legislation. The "equal time" accorded the AMA president consisted of a few selected moments of clips, prompting the famous utterance that "the truth about the American Medical Association lies on a CBS cutting room floor."

The better, accurate TV medical storylines are assisted in production by the AMA Physicians Advisory Committee on Radio, Television, and Motion Pictures. Always, a qualified physician adviser is on the set to suggest—with the concurrence of the producers—correct medical terminology, procedures, diagnoses, and treatment regimens. Of course, no effort is made to influence plots and story patterns. CBS refused this service when offered by AMA for "The Nurses."

Many physicians tell me that it's quite easy to keep the TV dial set on ABC and NBC. ★★★

Constitution and By-Laws of the Mississippi State Medical Association

CONSTITUTION

Preamble

That more may live longer in the richness and comfort of health; that pain, suffering, and disease may be eradicated to the extent made possible by scientific medical knowledge; that the standards of the medical profession may be maintained on the highest plane of honor, we dedicate ourselves as physicians through this Association. Among us, membership is a privilege, earned by professional qualification, personal honor, and selfless service; it is not a right vested superficially nor by statutory licensure. Truth shall be our quest; diligence, our staff; and service, our purpose.

Article I
NAME OF THE ASSOCIATION

The name and title of this Association shall be the Mississippi State Medical Association.

Article II
PURPOSE OF ORGANIZATION

The purpose of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Mississippi and to unite with similar associations in other states to form the American Medical Association, with a view toward the extension of medical knowledge, and to the advancement of medical science; to the elevation of the standard of medical education, and to the enactment and enforcement of just medical laws, to the promotion of friendly intercourse among the physicians and to guarding and fostering of their opinion in regard to the great problems of medicine, so that the profession shall become more honorable and capable within itself, and more useful to the public in the prevention and care of disease, and in the prolonging of and adding comfort to life.

The purpose of this Association shall be to promote scientific medical research and practice and shall be a non-profit organization.

Article III
COMPONENT SOCIETIES

Component Societies shall consist of those societies which hold charters from the Association.

Article IV
MEMBERSHIP

Section 1. Members of the Mississippi State Medical Association. Members shall be active, associate, emeritus, or scientific, according to requirements and provisions of the By-Laws. There may also be invited guests. All degrees of membership other than associate and scientific shall be construed as active in connection with the rights and privileges accruing therefrom.

Section 2. Guests. Any physician not a resident of the state may become a guest during any annual session upon invitation of a member of the Association, and shall be accorded the privilege of participating in all the scientific work of that session.

Article V
SESSIONS AND MEETINGS

Section 1. The Association shall hold an annual session during which there shall be held daily not less than two general meetings, which shall be open to all registered members and guests.

Section 2. The time and place for holding the annual session shall be fixed by the House of Delegates, but in emergencies, the Board of Trustees shall have the power to fix, or change, either the time or the place, or both of the annual session.

Article VI
GENERAL OFFICERS

Section 1. The general officers of this Association shall be a President, President-elect, three Vice-Presidents, one from each Supreme Court District, Secretary-Treasurer, Speaker, Vice Speaker, and Editor.

Section 2. The President, President-elect, and Vice-Presidents shall hold terms of one year. The Secretary-Treasurer, Speaker, Vice Speaker and Editor shall be elected for terms of three years.

Section 3. The officers of this Association shall be elected by the House of Delegates on the last day of the annual session following the adjournment of the general meeting, but no person shall be elected to any such office who has failed to attend two-thirds of the past two and current annual sessions and who has not been a member for the past two years.

Section 4. In addition to these general officers, there shall be an Executive Secretary who need not be a physician or member of the Association. He shall be appointed by the Board of Trustees and shall serve at the pleasure of the Association. His compensation and expenses for duties performed shall be fixed by the Board of Trustees and confirmed by the House of Delegates.

Article VII
EXECUTIVE OR CENTRAL OFFICES

The Executive Secretary shall maintain in the city of Jackson suitable offices for the discharge of his duties and for conducting the administrative affairs of the Association.

Article VIII
HOUSE OF DELEGATES

The House of Delegates shall be the legislative, business, and policy-making body of the Association and shall consist of (1) delegates selected by the component societies under authorized apportionment, (2) the general officers of the Association, (3) all past presidents, provided they still be members in good standing of the Association, (4) members of the Board of Trustees and Councils, and (5) elected committees, Delegates and Alternate Delegates to the American Medical Association, members of the State Board of Health, and members of the Board of Trustees of Mental Institutions, all of whom must be members of this Association.

Article IX
BOARD OF TRUSTEES

The Board of Trustees shall be the executive and governing body of the Association during vacation of the House of Delegates and shall perform such duties as are prescribed by law governing directors of corporations and in the By-Laws of the Association. The Board shall consist of nine members, one from each Association District, elected for terms of three years each. A Trustee shall not serve more than three consecutive terms.

Article X
FUNDS AND EXPENSES

Funds for meeting the expenses of the Association shall be arranged for by the House of Delegates by annual dues, per capita assessments upon the membership, and by voluntary contributions. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, publications, and for any other purpose approved by the House of Delegates.

Article XI
THE SEAL

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII
AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the annual session, provided that such amendment shall have been presented in open meeting at the previous annual session, and that it shall have been sent officially to each component society at least two months before the session at which final action is taken.

BY-LAWS

Chapter I
MEMBERSHIP

Section 1. Eligibility. Each component society of the Mississippi State Medical Association shall judge the qualifications of candidates for election to membership therein, which shall be restricted to those persons who hold the degree of Doctor of Medicine from an appropriately accredited source as defined by the American Medical Association, or in lieu thereof, a foreign degree in medicine which is an acceptable equivalent to the Board of Trustees and shall be a citizen of the United States. All candidates for any degree of membership other than associate must be legally licensed to practice medicine in Mississippi. Persons who obtained this degree prior to January 1, 1917, need not comply with this requirement but must be licensed to practice medicine in Mississippi or, if offering to practice in Mississippi must be eligible for license by reciprocity and be a member in good standing of a constituent (state) association of the American Medical Association. Membership in a component society, evidenced by the payment of dues for the current year, shall be a prerequisite to membership in the Association, except that a physician upon his initial application for membership in a component society of the Association shall be required to undergo a waiting period of ninety (90) consecutive days from the date he begins the practice of medicine in the geographical area of the component society before he may be elected to membership in the component society. No physician shall be eligible for membership who has been convicted of or who has plead guilty to either a felony or a violation of a state or federal narcotics law. The duly certified court record shall be *prima facie* evidence of pleas and convictions and cause automatic revocation of membership. No physician shall be eligible for election to or continuation of membership who does not possess a currently effective federal narcotics stamp, provided, however, that physicians in full time government service who need no registration to use, prescribe, and dispense narcotic drugs and those who, by reason of type of practice, employment, inactivity, or retirement, neither prescribe nor dispense narcotics and who for this reason alone have not applied for registration shall be exempt from this requirement.

Section 2 (a). Good Standing. Only those members in good standing shall be entitled to the rights and privileges of membership. A physician not in good standing may not be elected to office nor exercise the privilege of voting or attending any session of this Association, scientific or otherwise. The name of a physician upon the properly certified roster of a component society which has paid its annual assessment shall be *prima facie* evidence of his right to register at the annual session of the Mississippi State Medical Association. No member shall participate in any of the proceedings of the annual session until he is duly registered. No delegate or other member shall take part in any of the proceedings of an annual session until he has complied with the provisions of this section. (b) Change of State Residence. In the event that a member moves from the State, his membership shall continue until, and lapse at the end of, the current fiscal year, but this provision shall not operate to prevent a physician who moves from the state continuing his membership by payment of all dues and assessments to the state Association. (c) Obligations of Membership. When the Executive Secretary of the Mississippi State Medical Association is officially informed by the secretary of a component society that a physician is not in good standing in the component society, he shall remove the name of the physician from the rolls of the Association. A member shall hold his membership through the component society in the jurisdiction of which he practices, provided that a physician living on or near a county line may hold membership in the society most convenient for him to attend. If the society in which he chooses to secure membership does not exercise jurisdiction over the area of his residence, then permission must be obtained from the jurisdiction society to facilitate his affiliation with the extra-jurisdiction society.

Section 3. Degrees of Membership. Members of the Mississippi State Medical Association shall be divided into the following classifications: Active, emeritus, associate, and scientific. (a) Active Membership. Active members shall include all eligible members of component societies in good standing, providing that all dues and assessments in this Association as may be hereinafter prescribed have been received by the Association. (b) Emeritus Members. Any member of the Mississippi State Medical Association who has been an active member for any ten consecutive years and shall have permanently retired from the practice of medicine shall be eligible for election to emeritus membership. Election to emeritus membership for reason of retirement in the case of permanent and total disability shall merit special consideration but shall be subject to ruling by the Board of Trustees. Election to emeritus membership shall be based on the recommendation of the component society and the approval of the Board of Trustees. (c) Associate Membership. Any commissioned medical officer in the United States Army, United States Air Force, United States Navy, or United States Public Health Service, or any physician in the employ of the Veterans Administration, not licensed to practice in the State of Mississippi, stationed in Mississippi, members of medical faculties of medical schools in Mississippi, approved by

the American Medical Association, who are not licensed to practice in the state, any hospital intern, or any hospital resident in Mississippi, may, on election to associate membership by the component society in whose jurisdiction the physician resides become an associate of the Mississippi State Medical Association. Associate members shall not vote or hold office. (d) Scientific Membership. Physicians meeting the professional qualifications set forth in Chapter I, Section 1, may be elected scientific members by component societies. The rights and privileges of scientific membership shall be limited to participation in the scientific work of the association and such members shall not vote or hold office. Scientific members shall pay no dues to component societies or the state Association. In addition to these provisions, the privileges of scientific membership shall be subject to rulings of the Board of Trustees.

Section 4. Dues and Assessments. A per capita assessment determined by the House of Delegates shall constitute the dues of the Association, which assessment shall be collected from all active members by the respective secretaries of the component societies, provided that new members shall be accepted on payment of three-fourths of annual dues after May 1 and one-half of annual dues after September 1. Each active member shall pay the prescribed dues to the officer designated by the component society for transmittal to the Executive Secretary of the Association. Dues shall include a subscription to the official publication of the Association. (a) Members Excused From Payment. The Board of Trustees may, by majority vote, excuse a member from payment of dues because of undue hardship or similar circumstances warranting special consideration provided that the component society shall have excused in full the payment of dues for periods exceeding one year. Such circumstances shall be interpreted to include extended illness and temporary disability. (b) Emeritus Members. Physicians who have been elected emeritus members shall not be required to pay dues in the Association. (c) Payment of Dues and Delinquency. Dues of the Association are due and payable on December 31 of the year prior to that for which dues are prescribed. Failure to pay dues by April 1 of the year for which due shall result in forfeiture of membership privileges and the removal of the member's name from the rolls of the Association. A five dollar ($5.00) reinstatement cost shall be assessed against any member who is delinquent by reason of non-payment of dues after April 1 of the year for which dues are payable. A member in good standing who is called to active duty with the Armed Forces of the United States other than in the regular component shall be carried as an active member without payment of dues until such time as he is released from military service; receipt of publications of the Association during such period shall be at the expense of the member.

Section 5. American Medical Association. Members of this Association shall pay the dues or hold a legal exemption from the dues of the American Medical Association. These dues shall be paid through the component society to the Executive Secretary of the Mississippi State Medical Association, whose duty it shall be to transmit them to the American Medical Association and to obtain proper credits and receipts therefor.

Section 6. Revocation of Emeritus or Associate Membership. Any emeritus or associate membership may be revoked by two-thirds vote of the House of Delegates when, in the opinion of the House of Delegates, the conduct or actions of the emeritus or associate member violates any of the principles of the code of ethics or whose conduct or actions are not becoming to the honor conferred.

Chapter II
ANNUAL AND SPECIAL SESSIONS

Section 1. Time and Place. An annual session shall be held as required by Article V, Section 1, the Constitution of the Mississippi State Medical Association, which session shall in any event be held prior to the annual session of the American Medical Association. The place of the state session shall be fixed in accordance with Article V, Section 2, the Constitution of the Mississippi State Medical Association.

Section 2. Special Session. A special session of the Association or of the House of Delegates may be called by the President, with the approval of the Board of Trustees. The Board of Trustees is empowered to call a special session by majority concurrence.

Section 3. Inviting an Annual Session. A component society desiring the Association and House of Delegates to meet in annual session in a city within its jurisdiction may submit an invitation in writing or verbally through its representative to the House of Delegates at the annual session concerned with the selection of the site for the next regular scheduled meeting. The dates and site of the annual session selected may be changed by majority vote of the Board of Trustees in an emergency requiring such a change.

Section 4. Registration Privileges. Only the following shall be permitted to register at any session:

(a) Active members
(b) Emeritus members
(c) Associate members
(d) Invited guests
(e) Medical students of American Medical Association approved medical schools who are certified to the Executive Secretary of the Association by their respective deans.
(f) Interns and residents who are graduates of American Medical Association approved medical schools and who are connected with an approved hospital and who are certified to the Executive Secretary of the Association by their respective hospital superintendents in event they are not associate members of the Association.
(g) Commissioned medical officers of the United States Armed Forces who are on active duty and who if not associate members are certified to the Executive Secretary by their Post or Base Surgeons or Commanding Officers.
(h) Scientific members.

Section 5. Indebtedness. A member shall not be permitted to register unless all current indebtedness to both the Association and component of proper jurisdiction has been paid.

Section 6. Admittance. Admittance to any meeting of the House of Delegates, any scientific section, or any of the various exhibits at an annual session of the Association shall be limited to members in good standing, duly registered and invited guests, members in good standing of the Woman's Auxiliary to the Mississippi State Medical Association, duly accredited and registered members of the Press, and accredited technical and scientific exhibitors.

Chapter III
GENERAL MEETING

Section 1. Participation. The general meeting shall include all registered members and guests, who shall have equal rights to participate in the proceedings and discussions, but no member shall vote on any question coming before a section of the general meeting except those who have registered as members of such sections. Each section of the general meeting shall be presided over by its chairman. The address of the President and the Distinguished Service Oration shall be delivered before the general meeting at such time and place as may be arranged.

Section 2. Order. The order of exercise, papers, and discussions as set forth in the official program shall be followed from day to day until it has been completed. But no section shall be allowed to place more than five papers on its program, nor more than two invited guest essayists (out-of-state or non-member). When a section

program is not completed within the time assigned, it shall not be allowed to continue into that assigned to another section.

Section 3. Time Restrictions. No address or paper before the Association, except those of the President and Orator, shall occupy more than twenty minutes in its delivery, except that guests may be allowed thirty minutes; and in formal discussion no one shall speak more than five minutes; and in informal discussion no one shall speak more than three minutes and not more than one time.

Section 4. Essayists. With the exception of the invited guests, the essayists must be members of the Association. No name shall appear more than once on the printed program to discuss a paper before the regular scientific sections unless such person qualifies for membership as provided in these By-Laws.

Section 5. Papers. All papers read before the Association shall be its property. Each paper must be read by its author, and must be deposited with the Secretary when read.

Section 6. Failure to Read Paper. No author listed on the program who fails to read a paper at the session may be allowed a place on the program of the next annual session, but if the author, being unable to attend, shows his good intent by forwarding his paper to the Secretary before the annual session, he shall not suffer the penalty.

Chapter IV
SCIENTIFIC SECTIONS

Section 1. Designation of Sections. The scientific sections of the Association shall be as follows: (a) Section on Medicine, (b) Section on Surgery, (c) Section on Preventive Medicine, (d) Section on Eye, Ear, Nose and Throat, (e) Section on Pediatrics, (f) Section on Obstetrics and Gynecology, and (g) Section on General Practice.

Section 2. Section Officers. Each scientific section of the Association shall, as the last order of business during its regular meeting, elect a chairman and secretary who shall serve for a period of one year. A majority of votes cast shall be necessary to elect.

Section 3. Program. The Council on Scientific Assembly shall place any paper in its proper section. The Council shall so arrange the program that no one section shall be given precedence over others two years in succession.

Chapter V
HOUSE OF DELEGATES

Section 1. Apportionment and Representation. Each organized county shall be entitled to representation in all regular and special sessions of the House of Delegates, one delegate and one alternate for each fifty members in the county and one delegate and one alternate for each fraction thereof, but each organized county holding a charter from this organization having made its annual report and paid its assessments, as provided in this Constitution and By-Laws shall be entitled to at least one delegate and alternate, said alternate delegates to act only in the absence of the delegate or delegates from the respective counties. No county in a component society shall be without representation in the House of Delegates; each shall be entitled to one delegate and one alternate without regard to total membership. No alternate may be seated at any regular or special session of the House of Delegates unless the delegates elected from that county shall be absent or otherwise unable to participate in the proceedings. In the event that neither the delegate nor the alternate is able to attend the regular or special session to which they have been accredited, then any *bona fide* resident of the county may, if properly registered, qualify himself as a delegate. No representative of the component society shall be seated in the House of Delegates until all his dues, assessments, and obligations to the component society have been paid. Delegates and alternates shall be elected by their respective component societies for terms of not less than two years and shall assume office on the first day of the annual session following their elections; they shall be *bona fide* residents of the counties which they represent. Their names shall be reported to the Central Office of the Association not later than thirty days prior to the first day of the annual session. Representatives of component societies shall be seated in the House of Delegates only following their proper registration of credentials from the component societies they represent.

Section 2. Meetings and Attendance. The House of Delegates shall meet annually on the first day of the annual session of the Association. The House of Delegates shall meet for the conclusion of business on the last day of the annual session immediately following the adjournment of the last general or scientific session, provided that these requirements shall not operate to prevent such other meetings of the House of Delegates during the annual session as the House itself may order or the President or Speaker may deem necessary, but no such meetings may be called at times which would conflict with the scheduled general or scientific session. Duly registered members and guests may attend all meetings of the House of Delegates provided that they occupy a distinctly separate section of the meeting hall or auditorium and further provided that they shall not be permitted to participate in any phase of the meeting of the House of Delegates except on invitation of that body. By majority vote, the House of Delegates may enter into executive session, during which time only qualified delegates and officers of the Association may remain in attendance.

Section 3. Quorum. A three-fifths majority of registered and duly seated delegates of this Association shall constitute a quorum.

Section 4. Order of Business. The order of business shall be conducted at the pleasure of the House of Delegates, provided it shall not be in conflict with either these By-Laws or the Constitution. Meetings shall be conducted according to *Robert's Rules of Order, Revised,* and within the bounds of courtesy and this Constitution and By-Laws. Generally, the order of business shall be:

(1) Adoption of the Transactions of the previous meeting.
(2) Reports of Boards, Councils and Committees.
(3) Reports of Presidential Committees.
(4) Special Orders.
(5) Unfinished Business.
(6) New Business.

Section 5. Memorials and Resolutions. No memorials or resolutions shall at any time be issued in the name of the Mississippi State Medical Association by any officer or member thereof until such memorial or resolution has been approved and adopted by the House of Delegates or Board of Trustees.

Section 6. Duties and Responsibilities. It shall, through its officers and otherwise, give diligent attention to foster the scientific work and spirit of the Association, and shall constantly study and strive to make each annual session a stepping stone to future ones of higher interest. It shall consider and advise the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation and to diffuse popular information in relation thereto. It shall make careful inquiry into the condition of the profession of each county in the state, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in the counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality, and shall continue these efforts until every

physician in every county in the state has been brought under medical society influence. It shall encourage postgraduate work in medical centers, as well as home study and research, and shall endeavor to have the results utilized and intelligently discussed in the component societies. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body, the term of office to begin on January 1 of the year following that of the elections and continuing for two successive years. It shall, upon recommendation of the Board of Trustees, provide and issue charters to counties organized to conform to the spirit of the Constitution and By-Laws.

Section 7. Reference Committees. Business brought before the House of Delegates will normally be referred by the Speaker for hearing, debate, and recommendation to a reference committee. Sufficient reference committees shall be appointed by the President to expedite and assist in the deliberations of the House of Delegates. Such committees shall consist of not less than three nor more than five members, all of whom shall be members of the House of Delegates, who shall serve only during the regular or special session for which appointed. Any member of the Association shall have the privilege of appearing before a reference committee on any issue being considered. Additionally, reference committees may permit the appearance of any individual who, in the opinion of the committee, can assist its deliberations.

Chapter VI
ELECTION OF OFFICERS

Section 1. Ballot. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect.

Section 2. Nominations. The House of Delegates on the first day of the annual session shall select a Committee on Nominations consisting of nine members of the House of Delegates, one from each Association District. It shall be the duty of this committee to consult with the members of the Association and to hold one or more meetings at which the best interests of the Association and of the profession of the state for the ensuing year shall be carefully considered. The committee shall nominate to the House of Delegates three names for each general officer vacancy and two names for all other offices. No two candidates for President-elect may be named from the same county. Nominations for appointment to membership on the Mississippi State Board of Health shall be made by the House of Delegates in accordance with Section 7024, Mississippi Code of 1942, provided that six names shall be submitted, three of whom shall be elected and their names submitted to the Governor as nominees from each district, provided no member shall be nominated who has served two consecutive terms. The House of Delegates shall nominate five physicians when vacancies occur on the Board of Trustees of Mental Institutions which nominations shall be submitted to the Governor in accordance with law.

Section 3. Report of Nominations. The House of Delegates shall receive the report of the Committee on Nominations and elect officers, Trustees, and Council members on the last day of the annual session.

Section 4. Nominations from the Floor. Nothing in this Chapter shall be construed to prevent additional nominations being made from the floor by members of the House of Delegates.

Section 5. Executive Secretary. The Board of Trustees shall select and appoint an Executive Secretary as elsewhere prescribed in the Constitution and By-Laws of the Association.

Chapter VII
DUTIES OF OFFICERS

Section 1. President. The President shall have general supervision over all meetings of the various bodies of the Association, shall appoint all committees not otherwise provided for, shall deliver an annual address at such time and place as may be arranged, and shall perform such other duties as custom and parliamentary usage may require. He shall fill by appointment all vacancies occurring during his tenure of office among the general officers and on the Board of Trustees and Councils and shall be empowered to appoint such committees on an *ad hoc* basis as may be desired or required to conduct the affairs of the Association. He shall be an *ex officio* member of all Councils and committees. He shall be the real and acknowledged head, as well as the personal representative, of the medical profession of the State of Mississippi during his term of office, and insofar as practicable, shall visit by appointment the various sections of the state and the component societies of the Mississippi State Medical Association and assist the Trustees in their tasks of aiding and strengthening the component societies and in making their work more useful.

Section 2. President-elect. The President-elect shall be in charge of the work of organization, including membership, under the direction of the President, and shall exercise these duties and advise with the Vice Presidents and with the Board of Trustees in this phase of their activity. He shall be an *ex-officio* member of all Councils and committees. He shall succeed to the presidency upon the event of the death, resignation, or removal from office of the President. This automatic succession shall not operate to disqualify him from serving the next regular term of office unless he has served more than six months as President.

Section 3. Vice Presidents. The Vice Presidents shall assist the President in the discharge of his duties. They shall further assist the President-elect in the work of organization, including membership in their respective areas, and in promoting the welfare of the Association and the profession of the state.

Section 4. Speaker. A Speaker shall be elected for a term of three years. This officer may be chosen from the membership of the Association, irrespective of any affiliation with the House. The Speaker shall familiarize himself with the rules and usages of parliamentary procedure, with the laws of the House. On him shall devolve the duty of bringing before the House through the various officers and chairmen all reports and other matters that are to receive its attention. He shall preside at all meetings of the House and perform the duties usual to the position and office of chairman except in the appointment of committees, which shall be the privilege of the President.

Section 5. Vice Speaker. A Vice Speaker shall be elected for a term of three years to run concurrently with that of the Speaker. The Vice Speaker shall assist the Speaker in all duties prescribed in these By-Laws.

Section 6. Secretary-Treasurer. The Secretary-Treasurer shall be elected for a term of three years. He shall perform such duties ordinarily devolving on a secretary of a corporation by law, custom, or parliamentary usage and shall enjoy the rights and perform such other duties as may be granted or imposed in the Constitution and these By-Laws. He may delegate such duties as are herein described to the Executive Secretary who shall be responsible therefor. He shall be an *ex-officio* member of all Councils and committees.

Section 7. Executive Secretary. The Executive Secretary shall be appointed by the Board of Trustees and shall serve at the pleasure of the Association. He need not be a member of the Association nor a physician. He shall maintain a Central Office for the Association and shall be responsible for the management and proper functioning of the Central Office to the President of the Association and the Board of Trustees. He shall attend all sessions and meetings of the Association, the House of Delegates, the Board of Trustees, and shall serve at all times to perform such other duties as may be deemed beneficial to the Association by the President and Board of Trustees. He shall assist elected officers, Councils, committees, and

Trustees in the performance of their duties. Under instructions from the President, he shall conduct a comprehensive program of public education and all such other activities as may disclose favorably to the public at large the aims, objectives, and goals of service of the medical profession in Mississippi. He shall, when requested, place himself in position to assist any of the component societies of the Association and he shall attend meetings of the component societies when invited by officers thereof. He shall be made custodian of records, books and papers belonging to the Association and he shall keep account of and promptly place under the supervision of the Secretary-Treasurer such funds as may be delivered into his hands in the name of the Association. He shall give bond at the expense of the Association in such amount as may be required. He shall provide for the registration of the members and delegates at the annual session and cooperate in preparing for and arranging all functions of the Association, including the annual session. He shall procure an exact transcript of all proceedings of the House of Delegates. He shall maintain a register of all legal practitioners in Mississippi and he shall maintain detailed and exact records of the membership with regard to component societies, the Mississippi State Medical Association, and the American Medical Association. He shall issue evidence of membership to each physician who pays the annual assessment and is accepted in the Mississippi State Medical Association. He shall maintain close and complete liaison with the American Medical Association and shall keep the component societies informed of activities, programs, and mandates of both the state Association and the American Medical Association. He shall publish from the Central Office such memoranda, bulletins, and miscellaneous publications as may be directed by the President, the Board of Trustees, and the House of Delegates. He shall conduct the official correspondence of the Association as he may be directed. He shall employ such assistants as may be required, upon authorization of the Board of Trustees. He shall supply each component society with blank forms to be used in connection with membership and reports. He shall maintain records of monies paid by the component societies for assessments and dues. He shall prepare and publish under the direction of the President and Board of Trustees such programs as may be necessary for official functions of the Association. He shall be reimbursed for expenses incurred in the performance of his duties, separately and in addition to his regular compensation.

Chapter VIII
BOARD OF TRUSTEES

Section 1. Board of Trustees. The Board of Trustees shall be the executive and governing body of the Association during vacation of the House of Delegates. It shall consist of nine members, one from each Association District, where terms of office shall be three years and so arranged that only three members are elected annually. A Trustee shall not serve more than three consecutive terms. During vacation, the Board of Trustees shall exercise the powers conferred upon the House of Delegates by the Constitution and these By-Laws, provided that in the exercise of these powers thus conferred, the Board of Trustees shall neither consider nor act to contravene any action, mandate, or policy of the House of Delegates which may still be in effect.

Section 2. Officers of the Board. The Board of Trustees shall elect from its membership a Chairman, a Vice Chairman, and a Secretary for terms of one year during the last day of the annual session following adjournment of the House of Delegates. These officers of the Board shall compose its Executive Committee. The duties of the Secretary may be delegated to the Executive Secretary who shall maintain such special records and transcripts of meetings as the Board may desire.

Section 3. Meetings of the Board. The Board of Trustees shall meet daily during the annual session of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of any three members of the Board.

Section 4. Executive Committee. The Executive Committee of the Board of Trustees shall be empowered to act in behalf of the Board on all matters delegated to it by majority vote of the Board. The acts of the Executive Committee, however, shall be subject to confirmation by the Board.

Section 5. Reports of the Board of Trustees. The Board of Trustees shall make an annual report to the House of Delegates and such supplemental reports as necessity may require at a time designated in the regular transaction of the business of the House. The report shall be made by the Chairman, the Vice Chairman, the Secretary, or the Executive Secretary. The reports of the Board shall be made a portion of the annual transactions and proceedings of the Association.

Section 6. Duties of Trustees. Each Trustee shall be organizer and arbiter for his Association District. He shall visit the component medical societies within his District during each year and shall make an annual report of his activities and of the condition of the medical profession of each county of his District. Each Trustee shall be reimbursed for expenses incurred by him in traveling within his District or attending special meetings in the performance of his official duties, which will be allowed upon presentation of an itemized and documented account. This provision shall not be construed to include his expenses in attending the annual session of the Association.

Section 7. Public Policy. The Board of Trustees shall have the right to communicate the views of the medical profession and of the Association in the State of Mississippi with regard to matters of medical science, health, sanitation, and allied spheres of activity. It shall approve all memorials and resolutions issued but shall not issue memorials and resolutions heretofore prohibited in these By-Laws.

Section 8. Association Districts. The State of Mississippi shall be subdivided into Association Districts by counties, provided that all counties in a component society shall be in one Association District. These districts are defined as follows:

District 1: Bolivar, Coahoma, Humphreys, Leflore, Quitman, Sunflower, Tallahatchie, Tunica, and Washington.
District 2: Benton, DeSoto, Lafayette, Marshall, Panola, Tate, Tippah, Union, and Yalobusha.
District 3: Alcorn, Calhoun, Chickasaw, Clay, Itawamba, Lee, Lowndes, Monroe, Noxubee, Oktibbeha, Pontotoc, Prentiss, and Tishomingo.
District 4: Attala, Carrol, Choctaw, Grenada, Holmes, Montgomery, and Webster.
District 5: Hinds, Issaquena, Leake, Madison, Rankin, Scott, Sharkey, Simpson, Smith, Warren, and Yazoo.
District 6: Clark, Kemper, Lauderdale, Neshoba, Newton, and Winston.
District 7: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Pearl River, Perry, and Wayne.
District 8: Adams, Amite, Claiborne, Copiah, Franklin, Jefferson, Lawrence, Lincoln, Pike, Walthall, and Wilkinson.
District 9: Hancock, Harrison, Jackson, and Stone.

Chapter IX
COUNCILS

Section 1. Councils. Councils of the Association shall be elected standing bodies of the House of Delegates,

responsible thereto. There shall be a Council on Medical Service, a Council on Scientific Assembly, a Judicial Council, a Council on Constitution and By-Laws, a Council on Legislation, a Council on Budget and Finance, an Editorial Council, and a Council on Medical Education. A Council member shall not serve more than three consecutive terms.

Section 2. Council on Medical Service. The Council on Medical Service shall be charged with the responsibilities of ascertaining and studying all aspects of medical care in Mississippi. It shall examine and make available all facts, data, and opinion on timely and adequate medical care. It shall investigate social and economic aspects of medical care and report its evaluations and findings. It shall suggest means of distribution of adequate quality medical service to the public consistent with the policies of the Association. It shall act as a factfinding and advisory body of the Association. Under its jurisdictions, there shall be assigned the activities of the Association in medical service, emergency service programs, indigent care, and allied medical agencies. There shall be one member from each Association District elected for a term of three years and so arranged that only three members shall be elected for full terms each year. The Council on Medical Service shall appoint Committees on Cancer Control, Occupational Health, Federal Medical Services, Maternal and Child Care, Mental Health, Diseases of the Heart, and Aging. Each committee shall consist of not less than five nor more than seven members appointed for periods of not less than one nor more than three years.

Section 3. Council on Scientific Assembly. The Council on Scientific Assembly shall be composed of the Secretary-Treasurer and the chairmen of the several scientific sections. The Secretary-Treasurer shall be Chairman of the Council. Upon this Council shall devolve the duties and responsibilities of planning the annual session to include all scientific activity and the programming and scheduling of annual session events. The Council shall be empowered to appoint such committees for terms not to exceed one year as may be necessary to assist in the discharge of these duties.

Section 4. Judicial Council. The Judicial Council shall consist of nine members elected for terms of three years each, one from each Association District. The judicial powers of the Association shall be vested in this Council whose decision shall be final. The Council shall have jurisdiction in all questions involving membership in the Association, all controversies arising under the Constitution and these By-Laws, interpretation and application of the Principles of Medical Ethics of the American Medical Association, controversies between two or more component societies of the Association and among members of the Association. The Council shall have appellate jurisdiction in questions and controversies referred to the state Association by appropriate and authorized bodies of component medical societies. Appeals shall be perfected within six months following the date of decision by the constituted authority of the component society. The Council, under these several authorities, may conduct such hearings as may be necessary and after due and legal processes may, by majority opinion, censure, suspend, or expel any member for infraction of the Constitution or these By-Laws.

Section 5. Council on Constitution and By-Laws. The Council on Constitution and By-Laws shall consist of three members elected by the House of Delegates for terms of three years each. To this Council shall be referred all suggested amendments and changes in the Constitution and By-Laws of the Association for recommendation to the Board of Trustees and House of Delegates.

Section 6. Council on Legislation. The Council on Legislation shall consist of nine members, one from each association district, elected by the House of Delegates for terms of three years each which are so arranged that three members are elected annually. This Council shall analyze proposed legislation, recommending to the Board of Trustees courses of action for securing laws in the interests of public health, scientific medicine, as well as medical practice. It shall study and report the need for new and remedial legislation designed to serve the best interests of the state and nation. This Council shall be responsible to the Board of Trustees.

Section 7. Council on Budget and Finance. The Council on Budget and Finance shall consist of three members elected by the House of Delegates for terms of three years each. This Council shall receive reports of the finances of the Association and to it shall be referred all matters pertaining to the annual budget. The Council shall report annually to the House of Delegates, making specific recommendations on the annual budget of the Association. This Council shall be responsible to the Board of Trustees.

Section 8. Editorial Council. The Editorial Council shall consist of the Editor and the Associate Editors, elected by the House of Delegates to serve two years, and the former shall serve as chairman. To this Council shall be referred all reports of scientific subjects and all scientific papers and discussions presented before the Association and its component societies. The Council shall consider for publication in the official organ of the Association such papers, reports, and other data as may serve to further and advance scientific medicine in Mississippi. It shall exercise editorial authority over the official organ of the Association. This Council shall be responsible to the Board of Trustees.

Section 9. Council on Medical Education. The Council on Medical Education shall consist of three members elected by the House of Delegates for terms of three years each. To this Council shall be assigned the responsibilities of encouraging undergraduate and postgraduate study of medicine, licensure, and facilities for medical education in the state. This Council shall be responsible to the Board of Trustees.

Chapter X
COMMITTEES OF THE BOARD OF TRUSTEES

Section 1. Committees of the Board of Trustees. Standing committees of the Board of Trustees shall consist of the Advisory Committee to the Medical Auxiliary, Grievance Committee, the Committee on Publications, and the Committee on Medicine and Religion. All committees of the Board of Trustees shall be appointed by the Board for terms specified unless their selection is otherwise prescribed.

Section 2. Advisory Committee to the Medical Auxiliary. The Advisory Committee to the Medical Auxiliary shall consist of three members appointed for terms of three years each. The committee shall be charged with the responsibility of advising the Woman's Auxiliary to the Mississippi State Medical Association on matters of organization and program activity relating to the supportive role of the Auxiliary in its work with the Association.

Section 3. Grievance Committee. The Grievance Committee shall be appointed by the President with the advice and consent of the Board of Trustees. Its purpose shall be to prevent or resolve misunderstandings, to clarify and adjust differences between physician and patient, and to assist in maintaining the high levels of professional deportment already established by the *Principles of Medical Ethics*. The committee shall consist of nine members, one from each Association District, appointed for terms of three years each so as to provide for appointment of three members annually. Members of this committee shall not simultaneously serve on any disciplinary or appeal body of the Association or its component societies. The committee shall have authority to compel a response either in writing or by personal appearance from any member of the Association, author-

ity to initiate investigations on its own motion, and authority to file charges in the name of the committee before the Judicial Council of the Association. Under no circumstances shall the Grievance Committee ever exercise a disciplinary function and its power and authority shall be limited to the receiving of complaints, conduct of investigations, hearings, mediation, arbitration, and where necessary, referral of matters to appropriate bodies for adjudication or discipline. The committee shall prescribe its rules for operation which shall not be in conflict with generally accepted guides promulgated by the American Medical Association.

Section 4. Committee on Publications. The Committee on Publications shall consist of six members. These shall consist of Editor, the two Associate Editors, and three others, the three latter being appointed by the Board of Trustees for terms of three years which are so arranged to provide for appointment of one such member annually. The chairman of the committee shall be designated by the Board. The committee shall implement instructions and policies of the Board of Trustees relating to the official Journal of the Association. Additionally, the committee shall study and recommend to the Board policy proposals relating to organization and production of the Journal, reporting annually its deliberations.

Section 5. Committee on Medicine and Religion. The Committee on Medicine and Religion shall consist of six members for terms of three years each and so arranged to provide for appointment of two members annually. The committee shall be responsible for formulating a program in the field of medicine and religion and for carrying out such assignments as may be made in this connection by the Board of Trustees.

Chapter XI
RULES AND CONDUCT

The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

Chapter XII
COMPONENT SOCIETIES

Section 1. Component Societies. All component societies now in affiliation with this Association or those that may hereafter be organized in this state, which have adopted principles of organization not in conflict with this Constitution and By-Laws shall, upon application to the Board of Trustees and approval by the House of Delegates, receive a charter from and become a component part of this Association. The Board of Trustees and House of Delegates, on recommendation by the Judicial Council, shall have authority to revoke the charter of any component society whose actions are in conflict with the letter and spirit of this Constitution and By-Laws.

Section 2. Number of Societies. Only one component medical society shall be chartered in any county but nothing in this section shall be construed as to prohibit unofficial organization of medical clubs or other county level groups of physicians whose purpose it is to further and advance scientific medicine and postgraduate medical education.

Section 3. Members of Societies. Each component society shall judge the qualifications of its own members, but as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who is qualified under Chapter I, Section 1, of these By-Laws shall be eligible for election to membership, provided scientific members shall also qualify under Chapter I, Section 3, subsection (d) of the By-Laws. Before a charter is issued to any component society, full and ample opportunity shall be given to every such physician in the county to become a member.

Section 4. Right of Appeal. Any physician who may feel aggrieved by the action of the society of his county or District in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Judicial Council, which, upon a majority vote, may permit him to petition for membership in an adjacent society.

Section 5. Evidence of Appeals. In hearing appeals, the Judicial Council may admit oral or written evidence, as in its judgment will best and most fairly present the facts, but in case of every appeal, efforts at a conciliation and compromise shall precede all such hearings.

Section 6. Area Jurisdiction. A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

Section 7. Professional Authority. Each component society shall have general direction of the affairs of the profession in its jurisdiction and shall constantly use its influence to the moral and professional betterment of its physicians, to the end that the membership shall embrace every qualified physician in its jurisdiction.

Section 8. Meetings. Frequent meetings shall be encouraged, and the most attractive programs arranged that are possible. The younger members shall especially be encouraged to do postgraduate work, and to give the society first benefit of such labors. Official positions and other preferments shall be unstintingly given to such members.

Section 9. Delegates. Each county shall be entitled to representation in the House of Delegates of this Association, one delegate for each fifty members or fraction thereof. Delegates shall be elected for terms of not less than two years and societies shall report such elections to the Executive Secretary of the Association in no event later than thirty days before the annual session.

Section 10. Duties of Component Society Secretaries. The secretary of each component medical society shall perform such duties as are usual and customary to his office. He shall maintain the official roll of membership for his society, shall collect dues and assessments, and shall make official reports as elsewhere prescribed in these By-Laws to the Association, transmitting dues in behalf of component society members. He shall conduct the official correspondence of his component medical society.

Chapter XIII
FISCAL YEAR

The fiscal year of the Association and its component county societies shall begin January 1 each year and end on December 31 following, but membership in the state Association shall not lapse until April 1 of that year.

Chapter XIV
AMENDMENTS

These By-Laws may be amended at any annual session by a majority vote of the delegates present at that session, after the amendment has laid upon the table for one day.

Chapter XV
REPEALING AUTHORITY

Upon adoption of these By-Laws, all previous By-Laws, motions of record, mandates, policies, rules and regulations in conflict therewith are hereby repealed, except that officers elected to serve in the Association and its component societies shall continue their incumbency until the completion of their previously prescribed terms and their successors elected under the current By-Laws.

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume V, Number 7

July 1964

EDITORIALS

A Reasoned View On Smoking and Health

I

Physicians of Mississippi have joined their colleagues in more than a score of states in making a public declaration on health hazards of smoking. This formal expression was made by the House of Delegates at the 96th Annual Session. It is a reasoned, if not conservative, statement, asserting only that the association "believes smoking is potentially hazardous to health." It is contained in a resolution whose conditional clauses are equally reasoned, devoid of assertions not readily demonstrable.

Almost nobody with sufficient scientific information doubts that smoking contributes directly to health hazards, disease, and physiologic dysfunction, most of which have been understood by the medical community for many years. Only recently, in the current decade as a matter of chronology, has a dramatic association of cigarette smoking and the rising incidence of lung cancer been forcefully advanced, especially in the work of Horn and Hammond. The evidence as amassed in *Smoking and Health,* the report of the Advisory Committee to the Surgeon General, is too substantial to ignore.

To be both candid and fair, there are among us colleagues of high competence and respected professional attainment who entertain sincere doubts as to the extent of health hazard, if any, attributable to consumption of tobacco products. Some among these suggest that increase in the incidence of diseases associated with smoking may properly be ascribed to other factors within our admittedly complex environment. But with few exceptions, their contentions are philosophical rather than scientific, judicial rather than empirical.

II

Virtually every specialty discipline can indict tobacco consumption as the culprit in single and multiple disease entities within respective spheres of professional interest, however minor in occurrence and effect. To recount what medical science has understood for some years about the effects of tobacco upon the cardiovascular, pulmonary, digestive, and nervous systems is to flog a dead horse. Perhaps no other subject area has been treated so extensively in the literature in recent years.

As the list of state medical associations, local societies, and specialty groups who have made a public expression on the health hazards of smoking grows, physicians have a new and additional responsibility of viewing the mounting evidence with objective professional detachment characteristic of the science of medicine. On no few occasions, parties to the smoking and health debate sizzle, smoulder, and flare. Although every cause has its zealots, there is simply nothing to be achieved by intemperately diluting the scientific method with unscientific intransigence.

Quite obviously, this frank admonition is advanced toward a small minority of those who are most vocal on either side of the issue. More than likely, they will convince fewer and contribute less than those who patiently deliberate with no less concern or sense of urgency.

III

Our association's reasoned position included still another assertion with reference to those organizations engaged in the education of the public with respect to the potential health hazards of smoking. But most physicians as individuals and scientific practitioners will continue to exceed the mere giving of moral support in this respect. They will continue to counsel those patients for whom smoking is contraindicated because of disease. And they will continue also to have a professional interest in young people.

It is in the latter area that one of the greatest responsibilities occurs with regard to health education on tobacco usage. Nor is the hour too late for effective preventive measures among teenagers, either. Only recently, the respected Gilbert Research Group, the pioneer in youth research, published findings on smoking patterns among America's youngsters. Of all 13 to 18 years olds, 71 per cent *do not* smoke, and few in the 13 and 14 year levels, actually less than 15 per cent, have acquired the habit.

As expected, smoking increases with age, both as to numbers and extent of tobacco usage. At the 15 year level, 22 per cent smoke, and the pattern progresses in a consistent manner through the 18 year group where 47 per cent smoke. These findings are paradoxical, tending to show great opportunity for education on smoking and health among subteeners but with a growing segment of young adults becoming habituated before achieving their legal majorities.

IV

Mississippi physicians have formally recognized their professional obligations and opportunities with respect to the issue of smoking and health. Moreover, their expression as a scientific professional body is reasoned, sound, and couched in sincere concern for the public health and wellbeing.

The action of the House of Delegates at the 96th Annual Session is subject to no misinterpretation nor misconstruction of meaning. We shall hope for the same attitude of candor and concern among all members of the American medical community as those who are devoting themselves to serious investigation of this issue probe for new knowledge in this same spirit.—W.M.D.

REFERENCES

1. Smoking and Health, Report of the Advisory Committee to the Surgeon General of the Public Health Service, P.H.S. Pub. No. 1103, Washington, 1964.
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Transfusion Without Consent

The unswerving refusal of a religious sect, Jehovah's Witnesses, to consent to blood transfusions is a matter of deep concern to physicians and hospitals. Uppermost is the wellbeing of the patient, and medicolegal considerations, while secondary, are of high importance. The legal literature is replete with decisions ordering transfusions for children whose parents have refused to consent for these reasons. As recently as last year, Judge J. E. Harwell of Meridian conducted a hearing in a hospital, ordering transfusions for a 13-year-old boy whose parents were Jehovah's Witnesses.

Earlier this year, a Jackson general surgeon faced the dilemma of operating on a 38-year-old male who readily consented to surgery for a bleeding ulcer but who simultaneously refused to agree to blood transfusion, even if his life depended upon it.

Now the courts have apparently made a historic precedent in a District of Columbia case styled *Application of the President and Directors of Georgetown College, U. S. Ct. of App., D. of C., Misc. No. 2189, Feb. 3, 1964.* In this case, an adult female, married, the mother of a seven-month-old baby, was admitted for treatment of a perforated ulcer. The attending physicians expressed a professional opinion that she would die without blood transfusions but would have some chance for living if she received them. Both she and her husband were Jehovah's Witnesses, and neither would give consent for transfusions, even after careful explanation as to the probable and imminent consequences.

A federal district court refused the attending physicians and hospital authorities an order authorizing blood transfusions. The matter was

promptly taken before a single judge of the U. S. Court of Appeals for the District of Columbia, and after conducting a hearing at the hospital, he issued the order and blood was administered. A subsequent petition for rehearing by the full nine member court was denied 5 to 4, validating the action.

The judge issuing the order advanced five interesting reasons for doing so: (1) It was necessary to maintain the *status quo* in the proceeding, which is to say that if the patient died, she could no longer continue to press her cause at litigation; (2) the patient, being *in extremis,* was not mentally competent to decide for herself, and her husband had no right to refuse necessary medical care for her; (3) the state will not allow a mother to abandon a seven-month-old baby by refusing medical care necessary to preservation of life; (4) receiving blood by court order and without consent does not constitute a violation of religious conviction; and (5) the physicians and hospital, having undertaken treatment of the patient, had the obligation to give proper care, and failure to do so might have given rise to civil and criminal liability.

This significant precedent is of interest to every physician and hospital in Mississippi, because it may represent a new legal recognition of the necessity for medical care in a new frame of reference.—R.B.K.

Lobsters, Air Mail, and Medical Care

In Washington, the cry is for economy in government, but the deeds of the executive and legislative branches bespeak only of bureaucratic extravagance. Take the case of lobsters and air mail.

Air transportation rates for passengers, mail, and freight are determined by the Civil Aeronautics Board. Most airlines would like to reduce rates, but for a plethora of reasons, including subsidy of feeder airlines and high tariff agreements with foreign carriers, domestic price tags are both high and inexplicably inconsistent.

For years, the Flying Tiger Airline, a scheduled freight carrier, has been trying to reduce its air mail revenues. Frankly, the line admits it's being overpaid and honestly wants to do something about it. In an open letter to President Johnson, Flying Tiger president Robert W. Prescott put it this way:

"We applaud your efforts to reduce government expenditures. We respectfully suggest this for your consideration:

"Ten thousand pounds of lobsters fly from Boston to Los Angeles for $1,700.

"Ten thousand pounds of air mail from Boston to Los Angeles on the same airplane pays $4,200.

"Now, lobsters are very delicate to ship. They require special handling. They must get through. If they are delayed, they die. So, why don't we label air mail as lobsters and save $70 million a year?"

Mr. Prescott makes a strong case, just as one may be made for the cost of medical care in the Washington wonderland. Not only would King-Anderson-type compulsory care fail to do the job, it would be much like the price differential between lobsters and air mail, costing more for less value. This country needs to realign a few values in the air and on the ground.—R.B.K.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

Moore, William Ray, II, Meridian. Born Moundsville, W. Va., Nov. 11, 1928; M.D., Jefferson Medical College of Philadelphia, Penn., 1955; interned U. S. Navy Hospital, Portsmouth, Va., one year; ob-gyn residency, Charity Hospital of Louisiana, New Orleans, three years; member, American Academy of General Practice and the Society for Study of Sterility; lieutenant, U. S. Navy; elected Feb. 4, 1964, by East Mississippi Medical Society.

Oden, George Wesley, Jackson. Born Hattiesburg, Miss., May 29, 1930; M.D., University of Mississippi School of Medicine, Jackson, 1958; interned St. Thomas Hospital, Nashville, Tenn., one year; lieutenant, U. S. Navy, three years; elected May 5, 1964, by Central Medical Society.

Pyle, Charles Ray, Raleigh. Born Saltillo, Miss., Dec. 7, 1931; M.D., University of Mississippi School of Medicine, Jackson, 1960; interned Mississippi Baptist Hospital, Jackson, one year; elected Nov. 7, 1961, by Central Medical Society.

WALDEN, GERALD MARTIN, Ripley. Born Baldwyn, Miss., May 9, 1930; M.D., University of Mississippi School of Medicine, Jackson, 1960; interned Mississippi Baptist Hospital, Jackson and at the Mobile General Hospital, Ala.; elected April 2, 1964, by North Mississippi Medical Society.

WINDHAM, MARION RAY, Jackson. Born Mize, Miss., June 22, 1933; M.D., University of Pennsylvania School of Medicine, Philadelphia, 1957; interned, University of Mississippi School of Medicine, Jackson, one year; general surgery residency, University of Mississippi School of Medicine, Jackson; elected May 5, 1964, by Central Medical Society.

PERSONALS

FRANK ACREE of Greenville has been named president of the Twin-City Theatre Guild for the 1964-65 season.

F. L. BRANTLEY of Madden and B. R. WILSON of Carthage were given special recognition at the Leake County Chamber of Commerce annual meeting in recognition of their long service. The two physicians retired this year from active practice.

J. GORDON DEES of Jackson has been appointed to the National Development Council of Abilene Christian College by the board of trustees of the Texas institution. Dr. Dees' son, James, Jr., attended Abilene in 1960-62.

MAX GOLDEN of Laurel, JAMES W. SANDERS, III, of Meridian and OTIS B. WOOLEY, JR., of Jackson have been certified by the American Board of Obstetrics and Gynecology.

HUGH S. RAYNER of Meridian has been certified as a Diplomate of the American Board of Surgery.

JOE W. WIGGINS of Vicksburg has resigned his post of city and county health officer to begin a residency in pathology at the University of Florida.

DEATHS

CRAWFORD, BENJAMIN LAMPTON, SR., Tylertown. M.D., Jefferson Medical College of Philadelphia, Penn., 1904; interned South Mississippi Infirmary, Hattiesburg, one year; member, Southern Medical Association and the MSMA Fifty Year Club; member of the Mississippi State Board of Health for eight years; a past president of the Tri-County Medical Society and the Mississippi State Medical Association; Emeritus member of MSMA; died May 4, 1964, aged 85.

DARRACOTT, LEWIS WHEELER, Hamilton. M.D., Memphis Hospital Medical College, Tenn., 1912; received certificate from the University of Tennessee College of Medicine, Memphis, for 50 years of medical service; died May 8, 1964, aged 78.

GARRISON, HARVEY FRANKLIN, Jackson. M.D., University of Tennessee College of Medicine, Memphis, 1901; interned City of Memphis Hospitals, Tenn., one year; member of the American Academy of Pediatrics; a past president of the Southern Medical Association and the Mississippi State Medical Association; member of the Mississippi State Board of Health for eight years; Emeritus member of MSMA and member of the MSMA Fifty Year Club; certified by the American Board of Pediatrics; died June 3, 1964, aged 84.

South Central Local Society Changes Name

A pioneer component medical society of the state association has been redesignated by formal amendment of its charter.

This was the announcement of Dr. James L. Royals of Jackson, MSMA secretary-treasurer, who said that the former Tri-County Medical Society has been renamed the South Central Mississippi Medical Society by action of the House of Delegates at the 96th Annual Session.

The society's petition for redesignation was presented to the Board of Trustees who made the final recommendation to the House. The date of redesignation was May 14, Dr. Royals said.

The 64 member group includes over 90 per cent of physicians in Copiah, Franklin, Lawrence, Lincoln, Pike, and Walthall counties. Officers are Drs. Brantley B. Pace of Monticello, president, and A. V. Beacham of Magnolia, secretary.

Book Reviews

Endocrine and Metabolic Aspects of Gynecology. By Joseph Rogers, M.D., Associate Professor of Medicine and Lecturer in Gynecology and Obstetrics, Tufts University School of Medicine. 189 pages with illustrations. Philadelphia: W. B. Saunders Company, 1963. $8.00.

This book, although short, is a good comprehensive review of endocrine aspect of gynecology for those practitioners who do not limit their work but do general practice.

Some of the most common disorders one sees in practice is nicely discussed and outlined in the various chapters.

The chapter on amenorrhea, although very short, covers this subject adequately.

The chapter on premarital examination and marriage counseling is too short and does not go into complete coverage of this important subject.

This book is easy to read from the beginning and does not require much time to complete. It is recommended as a good book for reference for easily digestible material, and this reader feels it is a good book to add to a gynecological library.

FRANK G. GRUICH, M.D.

The Functional Pathology of Diseases: The Physiologic Basis of Clinical Medicine. Second edition. Edited by Arthur Grollman, M.D., Ph.D., professor and chairman of the Department of Experimental School, Dallas. 840 pages. New York: McGraw-Hill Book Company, Inc., 1963. $15.00.

This comprehensive book with contributions from 27 distinguished medical specialists has 979 pages including the index. It is an absolutely necessary and invaluable text for the senior medical student and intern. Every physician will find this book to be extremely useful as an up-to-date reference in physiology in its broadest sense.

Unfortunately, many of the chapters deal only with very small zones or areas of their subjects, while other chapters are quite comprehensive. This selectivity may be necessary in attempting to cover such a vast field. The references at the end of each chapter appear to be sufficient and should aid a reader in pursuing certain facets of information that have been omitted.

The physician who has been in practice for ten or more years will find this book to be unusually helpful in obtaining recent information in the field of clinical physiology. There are a few charts and diagrams but it would greatly benefit this type of reader if greater use had been made of these instructional aids. It would also be more easily used as a reference if many of the subjects were covered in outline form.

Dr. Grollman has made an excellent contribution to the teaching of clinical physiology.

KENDALL D. GREGORY, M.D.

Modern Clinical Psychiatry. Sixth edition. By Arthur P. Noyes, M.D., Director, Psychiatric Education, Pennsylvania Department of Public Welfare and Lawrence C. Kolb, M.D., Professor and Chairman, Department of Psychiatry, College of Physicians and Surgeons, Columbia University, 586 pages. Philadelphia: W. B. Saunders Company, 1963. $8.00.

This book is the modern version of the original classical edition of the late Dr. Arthur P. Noyes. The sixth edition does not vary too much from the fifth edition under the combined authorship of Dr. Noyes and Dr. Lawrence C. Kolb, who revised and rewrote many new sections of the book.

This edition has many interesting chapters. In the beginning there is a brief historical report on the various schools of psychiatry and those who have contributed to psychiatry. I found that an additional new chapter is that on psychopathology. The authors have simplified psychopathology where it can be understood by the practitioner or the student. I feel that this chapter is one of the most important additions to this volume and for this reason alone makes it a very desirable book for any physician's library. The chapters on alcoholism and psychophysiological autonomic and visceral disorders cannot be over emphasized. They are excellent presentations of the topics. The chapters on personality disorders, psychotic disorders, and the chapter that was added in the fifth edition on psychiatry and law, are very interesting and of great importance to the psychiatrists.

The new format of two columns on each page also makes the book easier to read. I feel that this book fulfills the needs of students and psychiatric residents as well as the needs of other specialists.

A. J. SANTANGELO, M.D.

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Meeting, Nov. 29-Dec. 2, 1964, Bal Harbour, Fla. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn, Chicago 10, Ill.

American College of Surgeons, Clinical Congress, Oct. 5-9, 1964, Chicago. Samuel P. Harbison, Secretary, 40 East Erie, Chicago 11, Ill.

Southern Medical Association, Nov. 16-19, 1964, Memphis, Tenn. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 10-13, 1965, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday January, First Wednesday March, May, July, September, November. Charles D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March, June, September, and December. William E. Riecken, Jr., P. O. Box 831, Kosciusko, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday April and October, Oxford. Vernon B. Harrison, P. O. Box 36, University, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucius Olen Crosby Memorial Hospital, Picayune, Secretary.

South Central Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.

Gulfport Hospital Dedicates Surgical Suite to Two MSMA Past Presidents

The Memorial Hospital at Gulfport has redesignated its newly augmented surgical facilities as the Parker-McCall surgical suite, dedicated to the memory of two Mississippi medical leaders who served as presidents of the state medical association. The dedicatory ceremony was conducted on Sunday, May 31, with families of the late Drs. E. C. Parker and Cummings H. McCall participating in the event.

Dr. C. D. Taylor, Jr., center, was principal speaker for the dedication of the Parker-McCall surgical suite at the Gulfport Memorial Hospital. He is shown in front of the bronze plaque bearing likenesses of the two physicians with Mrs. E. C. Parker, left, and Mrs. Cummings H. McCall, right.

Principal speaker was Dr. C. D. Taylor, Jr., of Pass Christian, secretary of the state medical association's Board of Trustees. In the dedicatory address, Dr. Taylor said that Drs. Parker and McCall "stood for that dignity, understanding, patience, fortitude, and skill that is the doctor."

He warned that "in this day of other systems of practice, systems of economics, and even systems of ethics, the light kindled by these stalwarts burns less brightly."

Highlight of the ceremony was the unveiling of a bronze plaque bearing near-life size likenesses of Drs. Parker and McCall, sculptured in *bas* relief, and the designation, Parker-McCall Surgical Suite. The facilities are located on the second floor of the modern 200 bed general medical and surgical hospital which is fully accredited by the Joint Commission on Accreditation of Hospitals.

Dr. Edward C. Parker, Jr., and Cummings H. McCall, Jr., sons of the honorees, unveiled the plaque. Mrs. Parker and Mrs. McCall were present with other members of their respective families. C. P. Wimberly, administrator of the hospital, presided, and Rev. Van R. Landrum spoke the invocation. The benediction, following the dedicatory address, was pronounced by the hospital chaplain, Rev. Keith Tonkel. Hospital officials, physicians, and other community leaders were among those attending.

Dr. Parker practiced at Gulfport from 1903 until his retirement in 1958. He was a charter member of the American College of Surgeons and served as a member of its Board of Governors. He was one of the founding members of the Mississippi chapter of the college. A graduate of the Tulane University School of Medicine, Dr. Parker served in positions of leadership in MSMA, being its president in 1934-35 and chairman of the Board of Trustees 1948-55. He was a founder of the Gulf Coast Clinical Society, a scientific organization of physicians in Mississippi, Alabama, and Florida.

Dr. McCall was graduated from Rush Medical College after preliminary training at Auburn. He was a Fellow of the American College of Surgeons, and as with Dr. Parker, he served as president of the Gulf Coast Clinical Society. He was president of the state medical association in 1954-55 and later a member of the Board of Trustees.

In the address, Dr. Taylor pointed out the similarities of the two careers. Both physicians were born in Alabama, both served as presidents of the Coast Counties Medical Society, both were MSMA presidents, and both had surgery as their principal professional interest.

Both Mrs. Parker and Mrs. McCall reside at Gulfport where they remain active in community affairs and the Woman's Auxiliary to the Missis-

sippi State Medical Association. Dr. Parker, Jr., is an Air Force medical officer trained in aviation and space medicine. Mr. McCall, Jr., is an electrical engineer on the technical staff of the Mississippi Power Co.

Legislature Enacts Kerr-Mills Program

Final enactment of legislation providing for full implementation of the Kerr-Mills program in Mississippi came during closing hours of the 1964 Regular Session. Guiding the MSMA-backed measure in the House of Representatives was Rep. Edgar J. Stephens, Jr., of New Albany, chairman of the Committee on Pensions and Social Welfare. Steering the bill in the Senate was Sen. Walter V. Moore, Jr., of Oakland, chairman of the Committee on Pensions.

Of three Kerr-Mills-type introductions, the successful proposal was House Bill 705, introduced by Mr. Stephens. Another House version and one in the Senate were killed in committee. Minor provisional, procedural, and editorial amendments passed by the Senate were concurred in by the House, eliminating the need for a conference committee.

The new enabling act authorizes establishment of Medical Assistance for the Aged (MAA), with the state fully controlling the program, determining the extent of services to be provided, and setting criteria for eligibility in erecting a means test. The program will help those citizens over age 65 who are found to need help in a climate of voluntarism, Sen. Moore said.

The new law provides for appointment of a medical advisory committee by the Board of Public Welfare from nominees proposed by the state medical association. There will be not less than nine nor more than 20 physicians named. The enactment also provides for permissive appointment of one representative of other recognized health care professions and fields "if, in the opinion of the Board, their service on said committee would be helpful to the State Department of Public Welfare in administering provisions of this act."

Mississippi has become the 42nd state to enact the Kerr-Mills program as to MAA aspects. The Old Age Assistance medical title of the law is operational in all states. More than 30 states have both MAA and OAA titles operational.

The association's chairman of the Council on Legislation, Dr. William E. Lotterhos of Jackson, expressed satisfaction over the enactment which he has characterized as "the state medical association's number one legislative objective." The enactment becomes effective with final passage as of June 3. Immediate appropriations were not made for the program during the regular session.

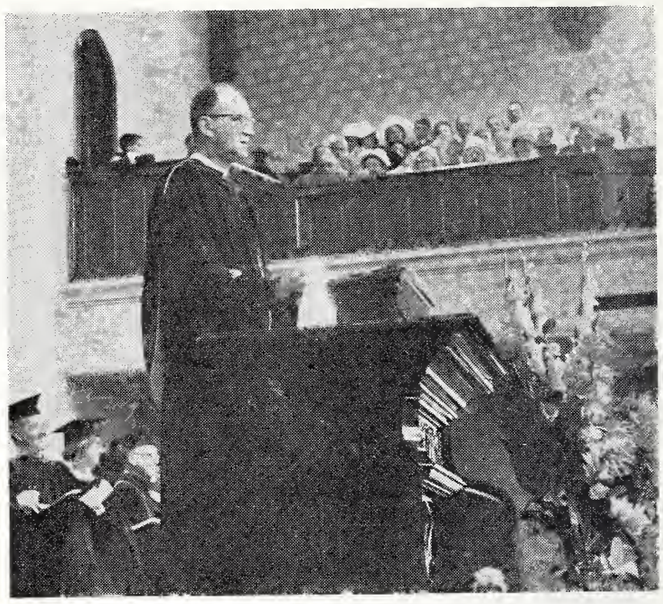
115 Receive Degrees In University Exercises

The 1964 Commencement of the University of Mississippi School of Medicine conducted June 7 culminated in 115 degrees being awarded in three schools. It was the largest graduation since the Medical Center opened nine years ago.

Included were 71 M.D. candidates, ten Ph.D. candidates, six M.S. candidates, and 28 B.S. in Nursing candidates.

Among the new physicians, there were 66 Mississippians and five out of state candidates. They represented 43 Mississippi towns and the states of New York, Illinois, Minnesota, and Alabama. State communities with more than one graduate were Columbus, two; Greenwood, five; Hattiesburg, two; Houston, two; Inverness, two; Jackson, ten; Laurel, three; Meridian, two; West Point, two, and Vicksburg, three.

Guest speaker for the commencement exercises held in the First Baptist Church was Dr. Hugh H. Hussey of Chicago, director of the AMA scientific activities division. Before accepting his AMA appointment, Dr. Hussey was dean of the Georgetown University School of Medicine and chairman



Dr. Hugh H. Hussey, guest speaker, brings home a point at the 1964 Commencement of the University of Mississippi School of Medicine. During the June 7 exercises, 115 degrees were awarded.

of the AMA Board of Trustees. Dr. Hussey's topic was "Expectations Versus Realizations in Professional Life."

"Learning is the search for truth, made easy by meditation," Dr. Hussey told the graduating students. "It is made hard by the complexities of modern-day life," he continued.

Winner of the Leathers Medal as most outstanding Medical school graduate was Dr. Frederick R. Cobb, right, here with Dr. Robert Q. Marston, dean of the University of Mississippi School of Medicine.

Dr. Hussey summed up, "Creative thought is the product of something beautiful and provides the type of thinking that is a source of progress."

Speaking before the early morning alumni breakfast, Dr. B. B. O'Mara, MSMA past president and former speaker of the House of Delegates, had told the graduates, "None of you has chosen an easy road to travel. You will never enjoy the luxury of indecision. You are given little or no latitude in validity of judgment. How well you do your respective jobs will be crucial to life itself."

"It should come as no surprise to you," continued Dr. O'Mara, "that you possess at this moment more scientific knowledge than was available to Pasteur, Halstead, Cushing, and Mayo in their lifetimes."

"From this day forward," he challenged the graduates, "you are trustees of this heritage of learning."

Dr. Frederick R. Cobb of Inverness, named most outstanding medical school graduate, received the Leathers Medal during the exercises. Dr. Cobb has been president of the Medical Student Body during his senior year, is a member of Alpha Omega Alpha, and had previously received the Roche Award for leading his class during the first two years in medical school and a Mosby Award for academic achievement. The top nursing school award went to Miss Nancy Sigrest of Jackson.

In the hour-long ceremony, Chancellor J. D. Williams awarded diplomas to graduates presented by Dr. Robert Q. Marston, dean of the School of Medicine and director of the Medical Center, Miss Christine Oglevee, dean of the School of Nursing, and Dr. Charles C. Randall, assistant dean in charge of graduate studies in the medical sciences.

Dr. Grenfell Heads Heart Association

Dr. Raymond F. Grenfell of Jackson was elevated to the presidency of the Mississippi Heart Association during the group's 13th annual meeting May 28.

Dr. James D. Hardy, professor and chairman of the Department of Surgery, University of Mississippi School of Medicine, was the luncheon speaker. He discussed recent advances in organ transplantation concentrating mainly on developments concerning the heart. He termed the Heart Association "the group that has done more for heart disease than any other."

Physicians named as directors were Dr. W. K. Purks, Vicksburg; Dr. J. P. Tatum, Meridian; Dr. Robert Q. Marston, Jackson; Dr. W. W. Lake, Gulfport; Dr. W. E. Weems, Laurel; Dr. Howard Nelson, Greenwood, and Dr. Charles Thompson, Columbia.

AMA Announces Tobacco Research Grants

Ten grants for tobacco research—including a project seeking chemical persuaders capable of inducing the body to manufacture cancer-fighting weapons—have been announced by the American Medical Association Education and Research Foundation.

Dr. Raymond M. McKeown, Foundation president, announced the grants through the AMA Chicago headquarters from his home in Coos Bay, Ore.

The projects for which grants were approved were the first awarded under the long-range research program on tobacco and health authorized by the AMA House of Delegates last December.

They were selected by the five-member committee of scientists appointed to direct the program for the Foundation. Dr. Maurice Seevers, committee chairman, said 27 applications for grants have been received and about 25 more are in preparation.

Those approved include projects to study the action of nicotine on cells, to produce synthetic

radioactive nicotine for research, to find more facts on the relationship between cigarette smoking and cardio-pulmonary disease, to study the effects of nicotine on the human heart, to determine how cigarette smoke affects the ability of the lungs to clear foreign particles, to measure the addictive qualities of nicotine, to study the effects of nicotine on heart muscle cells, and to study nicotine as a stimulant or a tranquilizer.

First-year grants for the ten approved projects totaled approximately $340,000. It was emphasized that grant amounts are subject to final review before agreements are drawn up. Duration of the projects will range from two years to five.

Dr. Seevers said the committee agreed that approval of a project indicated a moral commitment to support the project for the full period for which it was approved, subject to annual evaluation of progress. If all ten projects are carried through for their designated duration, the total financial outlay will approximate $800,000.

The AMA Foundation's tobacco and health research program is financed primarily from a $10,000,000, five-year unrestricted grant from the six major tobacco companies.

Dr. Brandon Receives Fifty Year Club Pin

Dr. John W. Brandon of Woodville received the Fifty Year Club pin and plaque in a presentation conducted by Dr. Sam McManus, president of the Wilk-Amite Medical Society, and Dr. S. E. Field, secretary.

A resident of Woodville since 1919, Dr. Brandon is a graduate of the Tulane University School of Medicine, class of 1913. He served as president of his senior class and graduated in the upper 10 per cent. He is a member of Alpha Omega Alpha, medical honorary.

Dr. Brandon began the practice of medicine in Money in 1915, and after a few years entered the U. S. Army for a 20-month tour of duty during World War I, ten months of which were spent in France.

He has engaged in the active practice of medicine until recent weeks when he has been confined to his home due to illness. The presentation of the Fifty Year Club insignia was made at Dr. Brandon's home with only members of the immediate family attending.

Dr. John W. Brandon received the Fifty Year Club pin and plaque on the anniversary of his 50 years in practice. The presentation was made by Dr. Sam McManus, president of the Wilk-Amite Medical Society, and Dr. S. E. Field, secretary.

State Morbidity Reported Through June 5

The Mississippi State Board of Health reports the following occurrence of morbidity for 1964 through the 23rd week of the year, ending June 5, 1964. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	444
Tuberculosis, O. F.	96
Salmonella Infections	13
Brucellosis	1
Encephalitis, infectious	13
Typhoid Fever	1
Dysentery	
Bacillary	29
Amoebic	7
Dysentery, N.O.S.	1
Food Poisoning, N.O.S.	1
Diphtheria	2
Septicemia, Staph.	3
Meningococcal infection	11
Meningitis, O. F.	16
Tularemia	1
Mononucleosis, infectious	43
Toxoplasmosis	1
Hepatitis, infectious	112

Tetanus	1
Helminthic infections	
Hookworm	420
Ascariasis	143
Strongyloides	25
Histoplasmosis	8
Streptococcus infections	
Scarlet fever	114
Strep throat	2,194
Taeniosis	2
Pertussis	58
Measles	6,568
Chickenpox	1,037
Mumps	868
Other Cestode Infestations	7
Influenza	363
Gonorrhea	2,486
Syphilis	
Early	164
Late	87

Dr. Long Is Renamed ICS Veep

The United States Section of the International College of Surgeons has reelected Dr. Lawrence W. Long of Jackson to succeed himself as vice president. The action came June 6 when the ICS House of Delegates convened at Chicago.

Dr. Long was also reappointed regent for Mississippi and confirmed by House action. He continues to serve as secretary of the general surgical section.

Delegates fixed the dates of the North American Federation of ICS' scientific meeting for Sept. 9-12, 1964. The conclave will be conducted at Chicago at the Palmer House. College spokesmen said that physicians in surgical specialties as well as anesthesiologists and radiologists will receive invitations to attend.

AUXILIARY

AMA Director Addresses Auxiliary Session

Featured speaker for the 41st Annual Session of the Woman's Auxiliary to MSMA was the Reverend Dr. Paul B. McCleave, director of the AMA Department of Medicine and Religion. Dr. McCleave addressed the luncheon meeting on May 12.

The 1964 annual session opened with a general session held on the morning of May 12 at the King Edward Hotel in Jackson. Introduced were Mrs. William Evans, president-elect of the Woman's Auxiliary to AMA; Mrs. Paul Gray, president of the Woman's Auxiliary to SMA; Mrs. Horace Buzhardt, president of the Woman's Auxiliary to the Student American Medical Association; Mrs. E. C. Parker, past president of the Woman's Auxiliary to MSMA, and Mrs. Lucille B. McCall, widow of Dr. C. H. McCall, past president of MSMA.

Reports were given by Mrs. A. T. Tatum on the June 1963 AMA Auxiliary convention and by Mrs. T. A. Baines on the SMA Auxiliary November 1963 session. Mrs. Gray brought greetings from the SMA auxiliary and an invitation to attend the November 1964 convention in Memphis, Tenn.

Dr. John Archer, MSMA president, thanked the wives for the "wonderful cooperation you have given to a bachelor president." MSMA President-Elect Omar Simmons spoke briefly to the Auxiliary and said he looked forward to working with the members during the coming year.

Mrs. L. T. Carl, civil defense chairman, announced that the Biloxi Auxiliary had won an award for outstanding work in civil defense and community activity. Mrs. M. S. Riddell, Jr., Auxiliary president, presented the award to Mrs. Wallace S. Sekul, representing the Biloxi group.

Two recommendations were adopted: (1) that the local auxiliary units meet more frequently in order to better promote the aims of the Woman's Auxiliary to AMA, (2) that dues of a national member-at-large be two dollars rather than one dollar annually which shall include a subscription for the *Bulletin,* the national official publication. This recommendation was made to concur with the proposed amendments to the AMA Auxiliary by-laws presented at the June convention of the AMA Auxiliary.

Mrs. Ralph Sneed, convention registration chairman, reported 119 registrations.

New officers elected for the 1964-65 year were:

Mrs. T. J. Safley, Jackson, president; Mrs. Hurd Gaddy, Long Beach, president-elect; Mrs. M. S. Riddell, Jr., Winona, first vice president; Mrs. H. E. Kellum, Vicksburg, second vice president; Mrs. George Moss, Natchez, third vice president; Mrs. H. H. McClannahan, Jr., Colum-

bus, fourth vice president; Mrs. David Wilson, Jackson, treasurer; Mrs. T. E. Ross, III, Hattiesburg, recording secretary, and Mrs. T. A. Baines, Jackson, historian.

Delegates to the AMA Auxiliary meeting in June 1964 will be Mrs. Safley, Mrs. Riddell, Mrs. Tatum, and Mrs. Howard Nelson. Alternate delegates are Mrs. J. P. Culpepper, Jr., Mrs. George Twente, and Mrs. Arthur Brown.

Mrs. Byron A. Mayo, treasurer, announced 818 memberships with 48 new members.

A memorial service was given by Mrs. H. C. Ricks, memorial chairman, for Mrs. Thomas Blake, Jackson; Mrs. Ira Bright, Greenwood; Mrs. H. E. Hoke, Gulfport; Mrs. Jane McGee, Greenwood, and Mrs. P. H. Rhyan, Philadelphia.

At the May 12 luncheon, the new officers were installed by Mrs. William Evans, president-elect of the AMA Auxiliary. Mrs. Riddell presented the gavel and president's pin to Mrs. Safley, incoming president, and received a past president's pin.

AMA-ERF awards were presented by Mrs. A. E. Brown, AMA-ERF chairman to the Lowndes County Medical Auxiliary, Mrs. A. E. Brown, chairman, 1st award; Central Medical Auxiliary, Mrs. Cyrus C. Johnson, chairman, 2nd award, and Gulfport Medical Auxiliary, Mrs. Edwin Throop, chairman, 3rd award.

Executive board meetings were held before and after the Auxiliary Annual Session.

Mrs. Riddell Gives President's Report

Mrs. Mal S. Riddell of Winona, 1963-64 president of the Woman's Auxiliary to MSMA, gave the annual President's Report during the May 12 luncheon.

During her tenure as Auxiliary president, Mrs. Riddell attended the American Medical Auxiliary Convention in Atlantic City, the AMA-ERF Workshop in Atlanta, the Conference for State Presidents and Presidents-elect in Chicago, the Southern Region AMPAC meeting in Atlanta, and ten component auxiliary meetings.

Mrs. Riddell reported that Auxiliary membership now stands at 819. She noted that Auxiliary members contributed $1,093.60 to AMA-ERF during the past year, and that 15,860 hours were given to community service.

Reviewing the work of component societies, Mrs. Riddell said that programs had been held on the School of Nursing, retarded children, and safety belts. Four auxiliaries, she noted, assisted in the Sabin Oral Vaccine Program and others in the Crippled Children Clinics. AMA films on Medicare, civil defense, mental health, and poisons were used as programs by other groups, she said.

One auxiliary is continuing their project of a Nurse Scholarship Fund, said Mrs. Riddell. Under this program, she noted, 17 girls have obtained nursing degrees, six girls are now in training, and the group has $1,262 in their fund.

Mrs. Riddell said that Auxiliary members sent many wires and letters to their congressmen on King-Anderson type legislation. Other projects included Doctor's Day and a redecorating program at the Mississippi Preventorium completed at a cost of approximately $1,400.

"It has been such a privilege and honor to have served as president of the Woman's Auxiliary to the Mississippi State Medical Association," concluded Mrs. Riddell. "Let us go onward with an earnestness that will command respect, with a goodness tempered with the intelligence necessary to solving human problems," she said.

Biloxi Auxiliary Awarded For Civil Defense Work

The Biloxi Medical Auxiliary was recognized during the 41st Annual Session of the MSMA Auxiliary for its outstanding work in civil defense and community health activities.

Mrs. M. S. Riddell, MSMA Auxiliary president, presented the award to Mrs. Wallace S. Sekul, Biloxi Auxiliary president. Mrs. L. T. Carl is state civil defense chairman for the Auxiliary.

Mrs. Sekul notes that there is considerable interest in civil defense among the Biloxi members due not only to the fact that they live in an area which might be involved in a nuclear disaster but because the area is frequently menaced by hurricanes. The Auxiliary vigorously supports both the Self Help Medical Care Program and the First Aid and Buddy Care Program, with members acting as a liaison between Civil Defense, Air Force personnel at the Keesler Base, and the public.

The group is also active in work with voluntary health groups, school organizations, and scouting. Their major project for 1963-64 was assisting in the polio vaccine drive sponsored by the Coast Counties Medical Society.

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UMC Names Three to Staff

Three new instructors have been appointed to the University of Mississippi School of Medicine faculty.

They are Dr. Jeanne Rae Bonar in medicine, Dr. Oliver Carrier, Jr., in pharmacology, and Dr. Carl Evers in pathology.

Dr. Bonar went to Centenary College of Louisiana, was graduated from medical school at the University of Arkansas, where she interned. She was a medicine resident at the Little Rock V.A. Hospital, Grady Memorial Hospital in Atlanta, Ga., Kennedy V.A. in Memphis, and the University Hospital in Jackson.

Dr. Carrier completed work for his Ph.D. at the University Medical Center in December, 1963. He has his B.S. degree from the College of Charleston, S. C.

Dr. Evers is a native of Minnesota, was graduated from Mankato State College and received his M.D. at the University of Minnesota. He interned at University Hospital in Jackson, served in the army medical corps and returned to the Medical Center on a fellowship.

Chest Physicians Plan Mexico Congress

Physicians from more than 50 countries will present papers and discuss the recent advances in cardiovascular and pulmonary diseases at the VIII International Congress on Diseases of the Chest to be held in Mexico City, Oct. 11-15, 1964.

Dr. Donato G. Alarcon, dean of the Medical School at the University of Mexico and professor of thoracic diseases is the president of the Congress and Dr. Ignacio Chavez, president of the University of Mexico and professor of Cardiovascular Diseases is the vice-chairman of the Congress.

The Honorable Adolfo Lopez Mateos, president of the Republic of Mexico will officially open the Congress on Sunday, Oct. 11.

For further information and registration blanks write to the American College of Chest Physicians, 112 East Chestnut St., Chicago, Ill. 60611.

Cancer Conference Set for Denver

Program plans for the 18th Annual Rocky Mountain Cancer Conference in Denver, July 10-11, have been finalized and will include participation by the presidents of the American Medical Association and of the American Cancer Society.

The two-day conference in the Mile-High City's Brown Palace Hotel will feature a symposium on "Etiologic Agents of Cancer, Their Avoidance or Prevention" on the first morning followed by an afternoon of scientific papers delivered by some of the nation's foremost physicians. The second morning of the conference will be devoted to a symposium on "Treatment of Cancer" with an "Information Please" session in the afternoon.

Dr. Wendell G. Scott, president of the American Cancer Society and Dr. Norman A. Welch, who will become president of the American Medical Association in late June, will participate in the conference.

Other leading participants are Nobel Prize winner Wendell M. Stanley, Ph.D., University of California, Virus Laboratory; Russell Ramon DeAlvaraz, M.D., professor, Obstetrics and Gynecology, University of Washington School of Medicine; William M. Christopherson, M.D., professor and chairman, Department of Pathology, University of Louisville School of Medicine; R. Relton McCarroll, M.D., orthopaedic surgeon, St. Louis; W. P. L. Myers, M.D., internist, Clinical Unit of Memorial Sloan-Kettering Cancer Center, New York; Tom D. Throckmorton, M.D., surgeon, Des Moines.

The conference is a joint effort of the Colorado Medical Society and the Colorado Division, American Cancer Society. Chairman for the 18th Annual Conference is Dr. N. Paul Isbell, of Denver.

Further information on the conference may be obtained by writing: Rocky Mountain Cancer Conference, 1809 E. 18th Ave., Denver, Colo. 80218.

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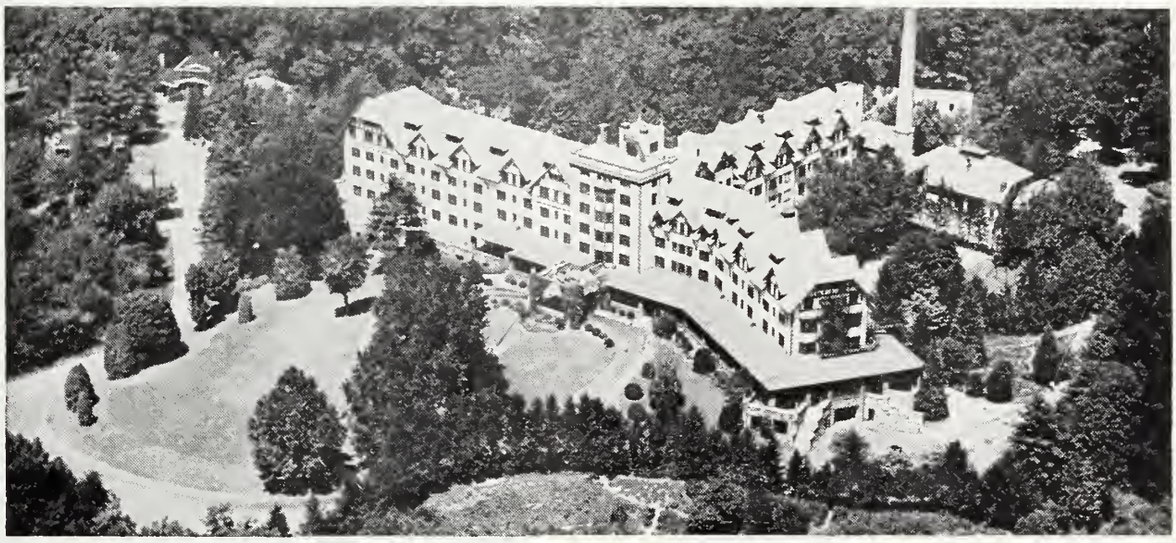

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AMA Film Catalog Now Available

The most complete catalog ever compiled of medical and surgical motion pictures has been published by the American Medical Association.

The new book, "Medical and Surgical Motion Pictures," lists over 3,000 available motion pictures dealing with every phase of the healing arts. Up-to-the-minute listings were made possible through computer processing.

The catalog is available at the cost price of $5.00 to addresses in the U. S., U. S. Possessions, and Canada; $5.50 to other foreign addresses. Write to the American Medical Association, 535 North Dearborn St., Chicago, Ill. 60610.

Ob-Gyn Board Sets Deadline

The American Board of Obstetrics and Gynecology has set July 1 as the final date for the receipt of new and reopened applications and requests for re-examination in the Board office.

All applications and letters of request must be accompanied by a duplicate list of patient dismissals for the preceding 12 months. This requirement also applies to those candidates who have previously been ruled eligible, but who did not accept examination in the same year.

Further information may be received from Clyde L. Randall, M.D., secretary, 100 Meadow Road, Buffalo, N. Y. 14216.

Two Mississippians Tapped by ACOG

Two Mississippians were among 649 new Fellows and five Associate Fellows inducted into the American College of Obstetricians and Gynecologists at the Twelfth Annual Clinical Meeting May 17-22 at the Americana Hotel, Bal Harbour, Fla.

They were Drs. H. Lamar Gillespie of Hattiesburg and Julius A. S. Bosco of Pasagoula. This brings the College roster to a total of nearly 8,800 including Life, Associate, and Junior Fellows from all sections of the United States and Canada.

To become a Fellow of ACOG one must be a physician who has completed an approved program of medical training, limited his practice completely to obstetrics and gynecology for at least five years, and have the unqualified professional approval of his colleagues. An Associate Fellow is anyone who have given valuable service in any of the fields allied to obstetrics-gynecology and who is qualified to assist the College in the accomplishment of its (educational) purposes.

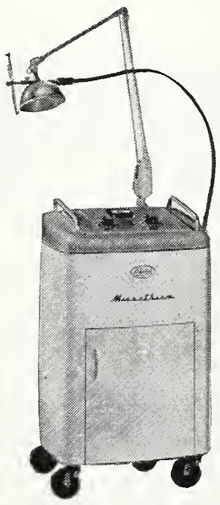
First Atomedic Hospital To Service World's Fair

The first Atomedic Hospital to be modeled after a research prototype in Montgomery, Ala., will serve as the official emergency hospital facility for the New York 1964-1965 World's Fair. This announcement was made by Brigadier General Sheldon S. Brownton, (Ret.), Fair chief medical officer and Stuart Constable, Fair vice president in charge of Operations.

In addition to providing emergency medical care for Fair visitors, the hospital building and its electronic patient monitoring equipment will serve as an exhibit for professional personnel, hospital

(Turn to page 28)

Burdick



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CONTRAINDICATION: Anuria.

1. Steigmann, F., and Griffin, R.: Evaluation of Quinethazone, a New Diuretic. *J. Amer. Geriat. Soc.* 11:945 (Oct.) 1963.
2. Schwartz, M.: Office Evaluation of a New Diuretic in Patients with Hypertensive Diseases. Scientific Exhibit Presented at the Clinical Meeting of the American Medical Association, Los Angeles, California, Nov. 25-28, 1962.

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HOSPITAL / Continued

administrators, health insurance experts, and interested delegates from foreign areas.

Gen. Brownton stated that John J. McKenna, M.D., of Queens Village, N. Y., has been appointed chief of professional services. In charge of all emergency medical care on the Fairgrounds, Dr. McKenna will be assisted by a staff of local physicians serving the Fair on a part-time basis with three to five doctors on the Fairgrounds at all times. "Beep" boxes and the use of the police security communications system will assure medical attention at the scene of an emergency within minutes.

Thirty-four professional nurses will be required to staff the hospital and to service five first-aid stations on an around-the-clock basis.

Gen. Brownton stressed that the Fair would provide emergency medical services only and that patients would be transferred to local hospitals for definitive care.

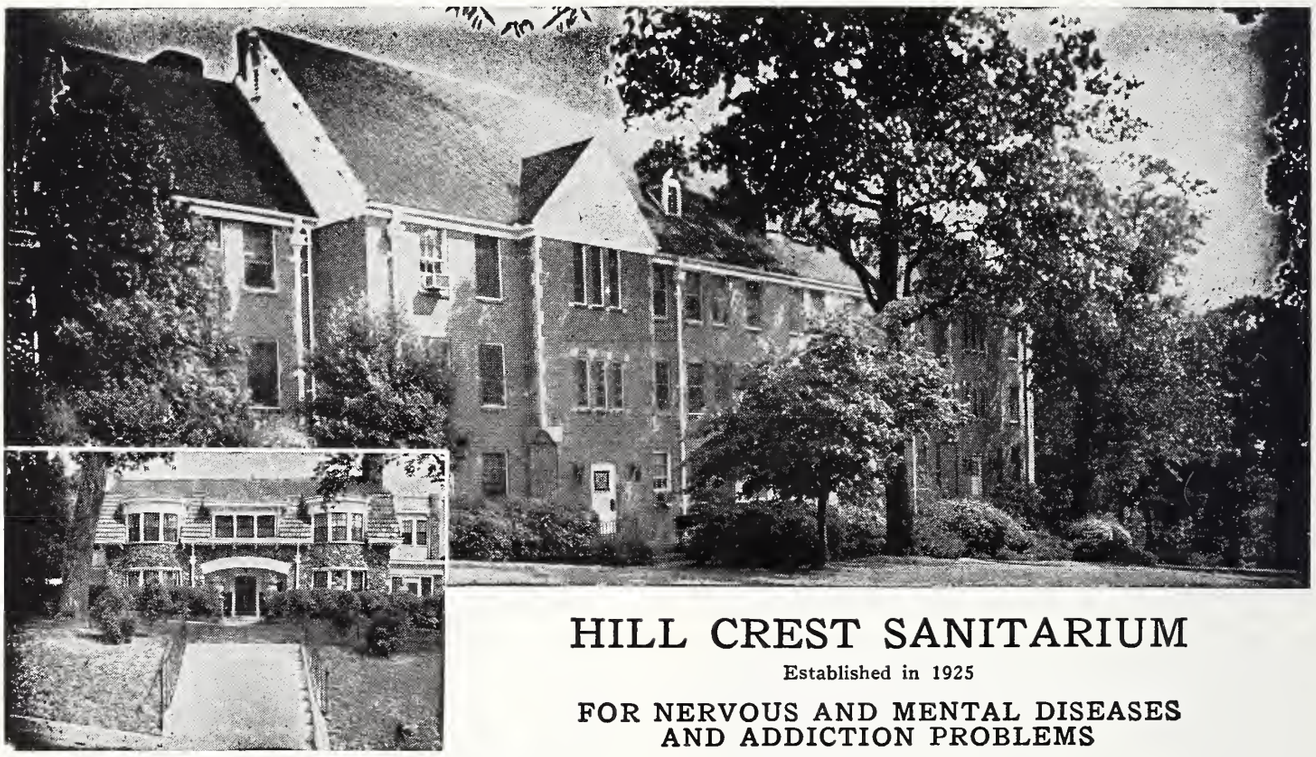
The circular, 100-ft diameter structure will be constructed of aluminum insulated with foam plastic. Prefabricated, and weighing only 50 tons when dismantled, it is readily transportable and can be assembled in a matter of days on its concrete pylon foundation. The estimated cost is about $35,000.

The central core of the hospital—its professional activity area—will house the control and monitoring equipment and provide space for emergency surgery. Surrounding this will be 22 two-bed rooms. However, Gen. Brownton plans to utilize the design flexibility inherent in the structure to form two large sick bays with beds for 8 to 12 patients in each, in addition to several private rooms. Entrance to the rooms will be from a peripheral corridor eliminating any trespass into the professional area.

Constant nurse-patient communication—both verbal and visual—will be possible via closed circuit television. The latest equipment for continuous monitoring of patient's vital body functions, including a computer which can automatically sense trouble will be demonstrated.

Utility requirements, including air conditioning and emergency power, will be concentrated in a "power pack" immediately adjacent to the hospital.

(Turn to page 29)



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Articles for Publication

Manuscripts should be typewritten, double spaced on one side of the paper. Tables, charts, and tabulations should be submitted on separate sheets but their position in the text should be indicated. Authors are encouraged to limit bibliographies to 10 references, written in conformation to style utilized in scientific publications of the American Medical Association. Articles are accepted for publication on the condition that they have not been previously published and are contributed solely to this JOURNAL.

A thesis summary of 75 to 100 words must accompany each manuscript separately from the text. Figures and drawings are acceptable when prepared with black ink on white paper. Photographs for illustrations should be unmounted, untrimmed, glossy prints and all such material must be identified. No charges are made to authors for illustration engravings not exceeding four column inches per printed page.

Reprints may be obtained at cost from the association. The right is reserved to decline any manuscript for publication. Ordinarily, manuscripts submitted will be acknowledged whether published or not.

HOSPITAL / Continued

The concept of a small, prefabricated, economic modular type medical facility with electronic monitoring equipment to increase efficiency and reduce professional work load was developed by Dr. Hugh MacGuire of the Automedic Research Center in Montgomery, Ala., for use in small communities and developing areas.

The interest generated by this pioneer effort to provide better and cheaper medical care has led to the formation of the Industry Planning Council comprised of some 60 companies involved in all facets of construction, electronics, utilities, transportation and hospital equipment. These industries have been coordinating their efforts—one of the few times since the war that an association of major industries has been voluntarily established to sponsor a research project.

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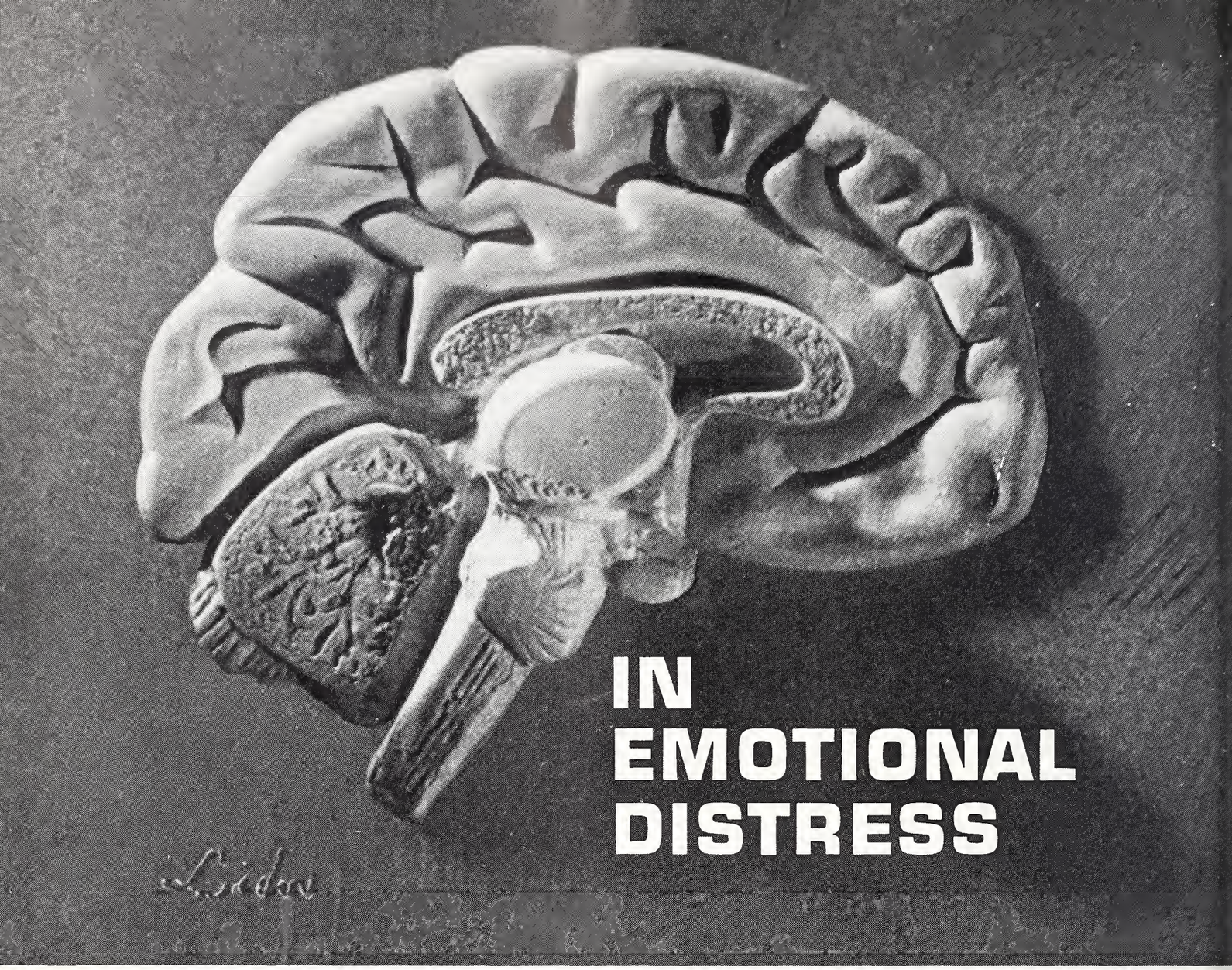

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Volume V
Number 8
August 1964

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The Journal of the Mississippi State Medical Association is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, $5 per annum; $1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

August 1964

Dear Doctor:

The direct service program for indigent cancer patients was transferred to State Board of Health from American Cancer Society on July 1. Under new arrangement, ACS will emphasize education, research, and local service. Applications to tumor clinics are now processed by SBH.

> State and federal cancer funds are administered by Board of Health which will now perform all administrative work. At the local level, however, ACS will continue drug and dressings program for terminal patients.

Watch for the Democratic National Convention to be filled with the sound and fury of fedicare, especially after adverse committee action in Congress. Delegates to Atlantic City conclave will hear party guns say, in effect, that U.S. is "a rich, productive, impoverished nation," what with gross national product at all time high, Dow Jones average hitting 850, but with paradox of Appalachia "poverty" and "need" for fedicare among the aging.

Mississippi State University will boast one of the nation's most modern student health centers when $400,000 project is completed in 1965. The three story building will have 30 bed hospital, 24 hour nursing service, inside parking, outpatient facilities, and complete food service. In 1963, MSU health service handled over 17,000 cases.

The mystery of the dead thrushes littering the grounds of the National Institutes of Health at Bethesda has been solved. Lab studies showed birds died drunkards' deaths, clobbering themselves against buildings, after getting stoned on crabapples that had frozen and later fermented.

Private health insurance will play an important role in October Olympic games at Tokyo for American athletes. U.S. Olympic Committee has protected all 500 competitors and coaches with $10,000 major medical coverage and $20,000 death benefits during entire period of participation.

Sincerely,

Rowland B. Kennedy
Executive Secretary

AMA Slams Cultists Before Congressional Committee

Washington - Representatives of AMA, testifying before Senate Committee on Labor and Public Welfare, scalded chiropractic as a cult and documented its discredited dogma. Hearing was on S. 1710, proposal to include chiropractic services under federal employees health program. Enactment of measure, considered highly unlikely, would make Blue plans pay cultists.

Dental Insurance Is Hailed As Success

Los Angeles - Dr. C. G. Watson, speaking for California Dental Association, said that dental prepayment and insurance programs, considered idle dreams 10 years ago, are proving highly successful. More than 55,000 individuals in southern California are now covered. Prepayment programs contain co-insurance features, and require periodic examinations and care. Free choice of dentist is also offered. Dr. Watson said commercial companies are entering field.

Major Drug Firm Files Suit In Rx Substitution

Philadelphia - Chas. Pfizer and Co., Inc., filed suit against a Philadelphia pharmacy for substituting generic tetracycline capsules for Tetracyn (Pfizer's tetracycline) which had been prescribed by a physician. Suit alleges that substitute capsules were "from sources unlicensed by Pfizer." Major supplier of bootleg antibiotics in U.S. is Italy where quality standards are far below those of U.S. drug makers.

AMA President Recommends GOP Health Plank

San Francisco - Dr. Norman A. Welch, AMA president, addressed the platform committee at recent GOP national convention, urging conservative stand for health plank. Dr. Welch recommended attack on air and water pollution, ionizing radiation (under state control), and other environmental health problems; increased research in mental disease; that aged Americans not be forced into involuntary retirement; and strong support of private health insurance. Nobody was surprised to hear him blast fedicare.

Unpaid VA Hospital Volunteer Is 'Legally' U. S. Employee

Chicago - A woman hospital volunteer, injured in a VA center while performing uncompensated duties, sued for damages under the Federal Tort Claims Act. The district court held that she was entitled to benefits under the Federal Employees' Compensation Act, thereby dismissing the tort claim. Since those eligible for recovery under federal employees' compensation have no recourse for tort, she was held to be an employee of government, even though an unpaid volunteer. Citation is McNicholar v. U.S., 226 F. Supp. (D.C., Ill., Jan. 13, 1964).

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
August, 1964, Vol. V, No. 8

ORIGINAL PAPERS

Carcinoma of the Endometrium

RICHARD A. STREET, JR., M.D.
Vicksburg, Mississippi

Carcinoma of the endometrium occurs in about 14 out of every 100,000 women. The author discusses incidence, diagnosis, and treatment and reports a ten year series of cases treated at Mercy Hospital.

THE SERIOUSNESS OF CARCINOMA arising in the breast, cervix, and ovary is generally recognized; however, there is little reason for the apparent widespread impression that adenocarcinoma beginning in the uterine fundus is easily cured. Of every 100,000 women, Randall[3] found there would be 14 cases of carcinoma of the endometrium. The five-year survival rate would be approximately 50 per cent, regardless of method of treatment, whether it be surgery or irradiation alone, irradiation preoperatively followed by surgery, or surgery followed by irradiation. It is, therefore, quite obvious that if we are to improve the survival rate in carcinoma of the endometrium, it must be done with additional methods of early diagnosis.

INCIDENCE

The occurrence of adenocarcinoma has been reported to be higher among women of large stature with hypertension, and in those with obesity, diabetes, or a history of infertility. The probability of adenocarcinoma increases if dysfunctional bleeding has been experienced prior to cessation of menstruation, particularly in the older age group, roughly 50 years and above. The ratio of carcinoma is definitely higher in those cases of dysfunctional uterine bleeding found to have cystic hyperplasia of the endometrium at curettage because of premenopausal dysfunctional bleeding.

Carcinoma of the endometrium has its peak occurrence in patients between the fifth and seventh decades of life with the average age at the time of diagnosis between 55 and 58 years.

DIAGNOSIS

It is felt that Papanicolaou smear, endometrial biopsy with either suction curet or Novak type curet, and thorough curettage in all cases of dysfunctional premenopausal bleeding or postmenopausal bleeding are necessary for early diagnosis. The main value of the endometrial biopsy is the simplicity of the procedure and the fact that positive findings often obviate the need for curettage.

CASES REVIEW

At the Mercy Hospital, during the 10-year period of 1950 through 1960, 48 patients with malignancy of the uterus were treated. Two additional patients with carcinoma of the uterus re-

From the Department of Gynecology and Obstetrics, Street Clinic-Mercy Hospital.

fused treatment. These cases are further subdivided into 42 cases of adenocarcinoma of the uterus, 7 cases of sarcoma of the uterus, and one case of adeno-acanthoma of the uterus. Of the 50 cases, 6 were Grade I adenocarcinoma, 15 were Grade II adenocarcinoma, 15 were Grade III adenocarcinoma, and 6 were Grade IV adenocarcinoma. Seven were myosarcoma, and one was adeno-acanthoma of the uterus. The youngest patient treated was 33, the oldest 75, with the average age being 58.7 years.

SYMPTOMS

Symptoms of postmenopausal bleeding occurred in 34 instances, irregular premenopausal bleeding in eight; two patients had excessive menstrual flow; two had abdominal pain, vomiting, and intestinal obstruction, and four patients had pelvic pain.

TREATMENT

Of the 20 primary lesions, eight patients had complete hysterectomy alone; seven patients had complete hysterectomy, followed in six weeks by radium to the vaginal vault; three patients had preoperative radium with subsequent complete hysterectomy; two patients had complete hysterectomy followed by deep x-ray therapy.

RESULTS

There are 22 patients still living, 21 showing no signs of recurrence, and one living with evidence of metastatic disease four years after initial treatment. Length of survival varies from 3 to 13 years, with 13 patients having survived 5 years or longer. There was no adequate follow-up on one patient, thus leaving an overall survival rate of 46 per cent on 48 cases with adequate follow-up.

Of the 22 patients living, 20 were classed as 1-A, with involvement of the uterus only. One case was classed as 1-B, with involvement of parametria. This patient is still living without evidence of recurrence 11 years later. One case was classed as 1-D, with involvement of right parametria and pelvic wall, and is now apparently free of disease 8 years later.

Of the 25 patients who are dead, it is interesting to note that only 4 were considered to be early enough for possible salvage, giving a corrected five-year survival of 81.4 per cent. Of these patients, all received irradiation plus hysterectomy, either as pre-operative irradiation plus hysterectomy or hysterectomy followed by irradiation. There were two cases of recurrent vaginal metastases, or 2 per cent of total cases.

CASE REPORT

This case was rather interesting because of the patient's age and the fact that she had few symptoms. Mrs. D. T. W., 33, was seen on Jan. 21, 1953, for her annual check-up. She had had two previous normal pregnancies, one in 1947 and one in 1951.

Her only complaint at that time was a slightly heavier menstrual flow for the past two months. Pelvic examination was entirely normal except that the uterus felt a little larger than average. For this reason, an endometrial biopsy was taken with the Novak curet, which was reported as adenocarcinoma of the uterus, Grade II. Complete hysterectomy was done on Jan. 27, 1953, with uneventful recovery. On Feb. 26, 1953, radium was applied in a London applicator in the vaginal vault for a total dosage of 1600 mg. hours. Recovery was again uneventful. Except for the usual menopausal complaints, the patient's health has remained excellent.

SUMMARY

Carcinoma of the endometrium remains a challenge for improvement in salvage. It is my opinion that earlier diagnosis, by whatever improved methods are available, is the best method to improve the five-year survival rate. ★★★

100 McAuley Dr.

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SPECIAL ARTICLE

Blueprint for Care of Mental Illness and Retardation

JOHN J. HEAD, M.D.
Whitfield, Mississippi

In November, medical and allied professional personnel from around the United States will meet in Chicago to discuss the nation's mental health problems during AMA's Second National Congress on Mental Illness and Health. Now in Mississippi, workers are meeting on an ongoing basis to discuss the state's mental health problems. The Mississippi study is directed by two councils, the Mississippi Mental Health Planning Council and the Mississippi Mental Retardation Planning Council. Both are under the auspices of the State Board of Health. By July 1, 1965, both councils must recommend long-range, statewide mental health and mental retardation programs for Mississippi.

In this article, the author, who is MSMA representative on the two councils, discusses the programs of the two groups and the physician's role in their work.

MISSISSIPPI PHYSICIANS have long been aware of the magnitude of the mental illness and mental retardation problems in this country and in this state. The American Medical Association, equally alert to the challenge, activated its first Committee on Mental Health on Jan. 1, 1952, giving it council status three years later.

This Council on Mental Health recommended that the AMA develop its own strong program in the mental health area—a program geared both to its own internal structure and relevant to on going programs throughout the country. In response to recommendations of the Council, the AMA, in October 1962, hosted its first National Congress on Mental Illness and Health. A second Congress also set for Chicago, will convene this November.

An AMA statement of principles on mental health reads, in part:

"Mental illness is America's most pressing and complex health problem. Tremendous strides have already been made in improving the care and treatment of the emotionally disturbed, but much remains to be done.

"The mental health field is vast and includes a network of factors involving the life of the individual, the community, and the nation. Any programs designed to combat mental illness and promote mental health must, by the nature of the problems to be solved, be both ambitious and comprehensive.

"The American Medical Association recognizes the important stake every physician, regardless of type of practice, has in improving our mental health knowledge and resources. The physician participates in the mental health field on two levels—as a man of science and as a citizen.

"The physician has much to gain from a knowledge of modern psychiatric principles and techniques and much to contribute to the prevention, handling, and management of emotional disturbances. Furthermore, as a natural community lead-

Chairman, Committee on Mental Health, Mississippi State Medical Association, and MSMA Representative, the Mississippi Mental Health Planning Council and the Mississippi Mental Retardation Planning Council.

er, he is in an excellent position to work for and guide effective mental health programs."

In 1962, Congress appropriated funds for two-year studies in the various states to determine their most urgent mental health needs, to appraise resources already available to meet those needs, and to anticipate the additional facilities, programs, and services necessary to continue to meet those needs on a long-range basis.

STATE STUDIES

Mississippi qualified under this program, and a Mississippi Mental Health Planning Council began its two-year study on July 1, 1963. Then, in 1963, Congress appropriated additional funds for similar studies to draw up plans for fighting and preventing mental retardation. Again, Mississippi met the qualifications for participation, and a Mississippi Mental Retardation Planning Council was established on July 1, 1964, to conduct its own statewide study.

All planning funds for both programs are channeled through the Mississippi State Board of Health, in conformity with grant-in-aid regulations. Both these planning councils represent interagency cooperation in action, since membership of both councils is made up of key people in the agencies most actively involved in the problems under study. Counting the task groups they have set up to study specific assignments, some 130 people are now actively engaged in these two programs.

Both councils report to the same executive committee (headed by Dr. A. L. Gray, executive officer of the State Board of Health), and both councils use the same professional coordinating staff (headed by Dr. Dorothy N. Moore, psychologist). Both councils face the same deadline, July 1, 1965.

By that date, they must recommend long-range, statewide, comprehensive mental health and mental retardation programs for Mississippi. The recommendations will call for implementation on all levels, federal, state, and local, by both private and public agencies. Accordingly, the recommendations will be made at all levels—to Congress, the state legislature, and local governing bodies. The extent to which they will be implemented depends upon the cooperative interest at all these levels.

Mississippi's physicians have always played a key role in matters of community interest. The mental health and the mental retardation planning programs now under way offer new opportunities for these physicians to express themselves on subjects of vital importance to the individual and to the community.

In order to express themselves most effectively, Mississippi doctors should keep themselves informed of the progress of the studies now under way. If time and inclination permit, they might become active participants in the studies, which are now absorbing the efforts of some 130 professionals and volunteers, either as members of the two planning councils or as members of the various task groups activated by these councils.

As the AMA statement of principles on mental health has asserted, the physician "is in an excellent position to work for and guide effective mental health programs." Those in charge of the planning studies now under way in Mississippi realize this and would welcome the interest and advice of Mississippi physicians. The AMA statement cited includes a pledge that the AMA will "be more active in encouraging physicians to become leaders in community planning for mental health."

TASK GROUPS

Every phase of the current statewide studies reflects areas of professional interest to the physician. For example, the Mississippi Mental Health Planning Council has activated task groups to study mental health needs as related to mental illness in adults, emotional disturbances in children, alcoholism, crime and delinquency, and multiproblem families in which these and other problems are each aggravating the other. In his daily practice, the physician encounters these obstacles to good health.

And the Mississippi Mental Retardation Planning Council has activated task groups to study the four areas of (1) prevention and clinical services, (2) residential and community care services, (3) education and training of the mentally retarded, and (4) public information and the law.

Both councils will use additional task groups to look into problems of their respective programs relating to the recruitment of manpower and the training of personnel; biometrics and research; the design, construction, and function of whatever physical facilities are called for in final recommendations; the administration, coordination, and financing of recommended programs, and legislative proposals for implementation of these recommendations.

The Mississippi physician can play an important role in each of these categories. Whether he does or not, he is vitally affected by each. Many

physicians are already involved in the current statewide studies. Others would be most welcome. Between now and the time the two councils make their recommendations on (or possibly before) July 1, 1965, all phases of mental health and mental retardation are on the agenda for debate and constructive suggestions by knowledgeable persons.

In Chicago last February, the American Medical Association sponsored the Tenth Annual Conference of Mental Health Representatives of State Medical Associations. Regional workshop discussions were held, and the six states (Alabama, Florida, Georgia, Mississippi, South Carolina, and Tennessee) of Region 4 had at the top of their agenda the question of how to involve the non-psychiatric physician in the development of comprehensive mental health programs.

The recorder for this discussion listed the various comments made by members of the group, including this one:

"One state reported that it did not intend to involve the general physicians of the state until after the state's mental health needs had been determined. Other states thought this was inadvisable and that physicians should be involved from the beginning in the identification of community mental health needs."

Those responsible for Mississippi's mental health and mental retardation planning programs emphatically adhere to the latter alternative. ★★★

Mississippi State Hospital

CAUSAL RELATIONSHIP

Challenged as to how he could prove a causal relationship between cigarette smoking and lung cancer when armed only with statistical data, Dr. Alton Ochsner, the famed New Orleans surgeon, responded with this story.

In Russia during the grand days of the last Czar, a nobleman named Ivan suspected his wife of extramarital interests. One evening, Ivan told her that he must go down to the Black Sea for a few days and left as though to go to the railroad station.

Returning to his palace a couple of hours later, Ivan was in time to see his wife and a Baron Alessandrov leaving in a carriage. He followed them to the Grand Hotel, and keeping in the shadows, watched them sign the register and ascend the stairs to a suite overlooking the street.

Through the lace curtains, Ivan watched Alessandrov and his wife raise their glasses in a toast, embrace, kiss, and douse the lights.

"Ah," sighed Ivan, "how I would confront that worthless woman after killing Alessandrov—if only I had proof!"

Clinicopathological Conference LV

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

A 68-YEAR-OLD colored male was referred to the University Hospital on April 29, 1961, because of "shortness of breath." He had been in good health until developing the "flu" in mid-January which was characterized by a cough productive of white sputum, stuffy nose, and moderate muscular weakness. These symptoms persisted until the last of January and at this time he developed anorexia, evening fever with night sweats, and since January he had lost 20 pounds.

In mid-February he developed two pillow orthopnea, nightly paroxysmal nocturnal dyspnea, recurrent episodes of sudden dyspnea at rest but no exertional dyspnea. There was no history of chest pain, hemoptysis, wheezing, hay fever, pedal edema, high blood pressure, or palpitation. He was treated by his local doctor with Digoxin, Mercuhydrin and an oral antibiotic, and sent to UMC.

PAST HISTORY

Past history revealed occasional headaches, no visual disturbances, vertigo, tinnitus, epistaxis, dysphagia, or frequent sore throat. He had occasional dull epigastric pain that was not affected by position or food nor was it related to a specific time. There was no history of hematemesis, melena, jaundice, or change of bowel habits. He had nocturia × 4 with decrease in stream size but no dysuria or hematuria. There was no history of surgery or recent dental procedures. There was no history of exposure to tuberculosis nor had he handled any rabbits.

Physical examination revealed a well-developed, well-nourished colored male in no acute distress with rhythmic bobbing of his head. Blood pressure was 130/30-0, pulse 96, and temperature 96. There was questionable icterus of the sclera, the fundi were normal, the conjunctiva were pale but free of petechia. Both tympanic membranes were intact and shining. No lesions of the mouth, oropharynx, or nares were noted. The neck veins were not distended when in the upright position.

In CPC LV Dr. Thomas M. Blake discusses the case of a 68-year-old Negro male who was admitted because of "shortness of breath." Symptoms included a cough productive of white sputum, moderate muscular weakness, anorexia, evening fever with night sweats, orthopnea, nightly paroxysmal nocturnal dyspnea, and recurrent episodes of sudden dyspnea at rest. Other discussers are Drs. James Robert Hatten, Robert Sloan, and Fred Allison. Dr. Joel Brunson presents the autopsy report.

The neck was not stiff and there were no palpable masses. There was no unusual dullness to percussion over the chest and diaphragmatic excursion was normal. No wheezes, or rubs were present, but a few crepitant rales were present at both lung bases and did not clear with coughing.

HEART RHYTHM

The heart rhythm was regular; there was a grade II/IV harsh blowing aortic systolic murmur and a grade II/IV decrescendo holo diastolic murmur radiating from the aortic area to the apex. There was no gallop but a systolic thrill was present in the aortic area. The PMI was diffuse and over-active. The abdomen was flat and no masses or organs were palpable. There was dullness to percussion in the suprapubic region, and a bruit was present in the periumbilical area. The genitalia were normal and the rectal examination revealed a 2+ enlarged smooth nontender prostate.

No clubbing, cyanosis, or petechia of the nail beds were noted, and there was no peripheral edema. The femoral and the radial pulse were bounding. The neurological examination was normal.

LABORATORY DATA

Urinalysis showed pH 7.5; specific gravity 1.020; albumin 1+; glucose negative; white blood count 2-4; red blood count 0; bacteria few; hemoglobin 7.5; hematocrit 27 per cent; ESR 8; MCH 25 micromicro grams; MCV 94 cubic micro meters; MCHC 26 per cent; total protein 6.8 gm.; albumin 2.6 gm. per cent; globulin 4.2 gm. per cent; glucose 109 mg. per cent; SGOT 52 units; alkaline phosphatase 11 KA units; total bilirubin 0.7 mg. per cent; BUN 90 mg. per cent; creatinine 2.8 mg. per cent; cephaline flocculation 2+; thymol turbidity 3 units; stool negative for blood and parasites; direct Coombs' test negative; three sputum specimens were negative for AFB and fungi on smear and culture. Urine culture was negative, and urine was negative for Bence Jones protein. Serum electrophoresis revealed slightly elevated gamma globulin. Four blood cultures were negative, and sputum culture grew out alpha hemolytic *Streptococcus* and *Neisseria*. Chest x-ray revealed cardiomegaly with congestive changes and probable pneumonitis. A barium enema and GI series were normal. The EKG was interpreted as showing nonspecific T waves abnormalities.

During the hospital course the patient remained afebrile but consistently had a tachycardia of 110 to 120. He was treated with Benylin expectorant, digitoxin, ferrous sulfate, and meprobamate. He was catheterized on admission and 200 cc. of urine was obtained. The catheter was removed on the fourth hospital day, and he was able to void without difficulty. His lungs became clear to auscultation, but he continued to have recurrent attacks of dyspnea. On the tenth day of admission the patient expired during a dyspneic episode.

DISCUSSION

Dr. Thomas M. Blake: "There are several approaches to discussing a CPC. One of them is to use it as a springboard for a discussion of the disease which the protocol describes and on which the discusser is an authority, but this is not the case this afternoon. All I intend to do is to try to build a logical case on the basis of the information in the protocol.

"We have a 68-year-old Negro man with a four month history beginning with a bad cold, cough, and mucoid sputum. Apparently there was no fever but there was anorexia and weakness. Whether this cold was actually the beginning of his illness or whether, as is occasionally the case, a cold called attention to symptoms which had been so insidious in their onset that they had not been noticed before, is something about which we can only speculate. After about two or three weeks he began to have anorexia, fever, and sweats, and it became apparent that he was losing weight. By the time he had been sick a month he had developed orthopnea and paroxysmal nocturnal dyspnea without exertional dyspnea. This is a very remarkable set of circumstances, and I think it probably should be disregarded. Paroxysmal nocturnal dyspnea means paroxysmal left ventricular failure, and it would be hard to have this without some sort of exertional dyspnea. If it is true, though, that he had no exertional dyspnea, then we have to consider the possibility of some sort of paroxysmal respiratory (or perhaps we can say pulmonary) disorder. Just what this would be I don't know, but recurrent showers of pulmonary emboli is a possibility which will come up again in the discussion.

"He was treated for congestive heart failure with nothing more than the noctural dyspnea to justify it. Someone must have thought he had infection since we are told that he was given antibiotics, but we don't know what antibiotics, where they thought the infection was, or what the infection was. He was treated for infection and for congestive heart failure, though, without specified results. He must not have gotten much better because he continued to lose weight, and after losing 20 lb. in four months he was admitted.

SYSTEMS REVIEW

"The systems review which has been extracted in the protocol is interpreted by me as good evidence against his having primary atherosclerosis as the basis for his disease. There seems to be no support for a diagnosis of tuberculosis, "asthma," or right-sided congestive heart failure. His headaches are pretty unimpressive and could go along with almost anything one wanted to name. There is no history of rheumatic fever or of a stroke. This epigastric pain was so vague that having mentioned it I think I can pass it over. There is really nothing to suggest gallbladder disease or upper GI disease; liver disease perhaps, is suggested but not very seriously at this stage. There is some suggestion that he has benign prostatic hypertrophy.

"So at the end of his history we can say that this man presented with a four month history that sounds like a progressive wasting disease due either to infection or to neoplasia and complicated by intermittent dyspnea suggesting paroxysmal left ventricular failure. The history is against tuberculosis, and the combination of heart disease and progressive febrile illness suggests bacterial endocarditis. No specific neoplasm is suggested. One thinks of lymphoma, hypernephroma, and Hodgkin's disease as being associated with fever, but none is supported very specifically by anything given in the history.

PHYSICAL EXAMINATION

"So we get down to the physical examination. He was described as well developed and nourished, and this came as a surprise to me as I had expected him to be sick after this history. His head was nodding, a sign which immediately suggests aortic regurgitation. There is no history of murmurs at all so this nodding of the head is the first suggestion that we have of a specific cardiac lesion. At this point we can consider how aortic regurgitation might fit into the picture. He may have had it for years and it may be an incidental finding, or it may be part of his presenting illness. We have no very good basis for speculation about this, but now we do have support for our suspicion from the history that he does have left ventricular failure. The blood pressure confirms the fact that he has a rapid diastolic run-off in his peripheral arterial system but it doesn't tell us that he has aortic regurgitation. This could go along with a patent ductus or with an AV fistula anywhere, but the most likely basis for a diastolic pressure of 0 or 30 is aortic regurgitation.

"The questionable icterus fits into the subsequent vague suggestion of liver disease, but I do not think it can be regarded as of any real significance because of the circumstances. The lighting problem in the hospital has been mentioned several times in these CPC's and the fact that this patient was a Negro makes it even more difficult to interpret mild jaundice. There were no petechiae and no splenomegaly. This, of course, is against one of the original impressions, bacterial endocarditis. He had no neck veins distention, no splenomegaly, and no edema, so I think we can say that he had no right-sided heart failure. Basilar rales he had and these could mean left-sided failure or perhaps infection or possibly pneumonia. His chest film will help us to make this decision.

HEART FINDINGS

"The findings on examining the heart confirmed the diagnosis of aortic regurgitation and also suggested the presence of aortic stenosis. It is not necessary to make a diagnosis of stenosis of the valve, that is, of anatomic narrowing of the aortic valve, in the presence of what is clearly aortic regurgitation. The increased cardiac output associated with the increased flow past the valve due to the regurgitant lesion would result in a disparity between flow and cross sectional area which would produce the systolic murmur. However, he could have had both anatomic stenosis and anatomic regurgitation. He did have aortic regurgitation. The absence of a gallop doesn't help but the presence of one would have meant that he had myocardial failure. Apparently he wasn't in clear-cut failure at the time of examination, and I don't think the absence of a gallop will influence our thought about this one way or the other.

"He didn't have any meningitis. Maybe this is just mentioned as part of a complete write-up that his neck wasn't stiff, but I haven't yet thought of anything that would have made his neck stiff that would fit into the picture anyway. Maybe I am missing something. Why the absence of masses in the neck is mentioned specifically and there is no reference to nodes is something that I want to know about. This may be significant, though I cannot see how.

"The really difficult thing in the physical examination is the statement that he had some suprapubic dullness. No associated findings are mentioned and there is no statement as to what happened to the suprapubic dullness, its extent, or anything else about it. Similarly, the statement that he had a periumbilical bruit is confusing without saying exactly what is meant by periumbilical and whether it was systolic or diastolic or loud or soft or associated with any other findings or what happened to it subsequently. These two things which are so exotic that they could easily be the key to something are not presented in enough detail to allow us to evaluate either of them. Presumably the suprapubic dullness was bladder. The combination of bladder with some nocturia, or maybe frequency, and aortic regurgitation, makes one think of a cord lesion—take dorsalis. The VDRL is not reported, and there are no other

neurologic findings to go along with this. He did have an enlarged prostate, and I think prostatic hypertrophy would be the most likely basis for this bladder—if it is a bladder.

"The bruit I have mentioned already. We think about the venous hum associated with liver disease and due to collateral circulation around the liver. An aortic regurgitant murmur could be audible all the way down to the periumbilical area and could also have been heard in the right lower quadrant, but since the periumbilical area is singled out, we don't know. The possibility of stenosis of the lumen of the abdominal aorta by an atheroma with a systolic murmur also exists. I think it is unlikely for an aneurysm to produce such a murmur but it could. Peripheral pulses below this area were good. I choose to disregard the suprapubic dullness and the periumbilical bruit.

AORTIC REGURGITATION

"At the end of the physical examination, then, we have a man with aortic regurgitation due to undetermined cause and of unknown duration who has begun recently to go into paroxysmal left ventricular failure. He also has a four months' history of a wasting disease which sounds like infection or neoplasm, and it is possible that his aortic regurgitation is part of his present illness or completely unrelated to it. Presumably it is due to rheumatic fever in the past or to lues or to what might be called *idiopathy*. Somebody once defined this as coming from two words, *idio* meaning *I don't know* and *pathic* meaning *a damn thing about it*. It is a good definition I think.

"Aortic valvular lesions in 68-year-olds are frequently called *calcific*, a descriptive term and not really a diagnosis. The school of thought that I think is supported by the best evidence says that practically all aortic valvular lesions, like practically all mitral valvular lesions, can be attributed most likely to rheumatic involvement in the past and when calcium gets deposited we just have a calcified old rheumatic lesion, not a lesion due to atherosclerosis. People have tried to associate aortic lesions with TB, ineffectively I think. They have been associated with rheumatoid arthritis of the spine and with lues. We have nothing specific to tell us what this man's aortic valvular lesion is due to, but I suspect that it antedated his terminal illness.

"Once again the nodes have not been mentioned and the history and physical findings at this stage leave me unfulfilled. Dr. Hatten, can you tell us now about the nodes?"

Dr. James Robert Hatten: "There weren't any nodes."

LAB REVIEW

Dr. Blake: "There weren't any nodes, no adenopathy. Well, I can change my thinking as I go.

"I have arranged the laboratory data into what seems to be logical groupings. The stool was negative, and this is impressive. The urine was unimpressive except for one plus albumin. The culture and Bence-Jones protein were also negative. That they looked for Bence-Jones protein obviously means that they were thinking in terms of multiple myeloma, but its absence does nothing to exclude that diagnosis since it is present in only approximately 50 per cent of patients who do have multiple myeloma. The blood studies showed slightly hypochromic and microcytic anemia of moderate proportions. This could go along with infection, with neoplasia, or maybe it doesn't mean anything at all. I don't know what his economic status was, and this is probably a real anemia for almost anybody, but it is pretty nearly totally nonspecific. A white count and differential were not given, and I made a considerable issue of this in a negative sense in my thinking, interpreting these as having been left out because that they would give away a diagnosis. His sedimentation rate was not elevated. Now I am assuming that this is a corrected sedimentation rate, and it would be nice if both corrected and the uncorrected sedimentation rates were given so that we could interpret for ourselves. With an hematocrit of only 20 or 30 or whatever it was it is unlikely that he would have a spectacularly high sed rate anyway, I suppose.

"I remember one patient in whom the diagnosis of multiple myeloma was established ultimately as a result of a sed rate that didn't sed. It turned out that this patient had rouleaux formation in her blood which apparently was so rapid that the sedimentation rate was just 0. The sedimentation rate in the present case is against everything that we think of including the usual case of multiple myeloma. The Coombs was negative. Well, I don't know exactly what they were thinking of when they did the Coombs unless they were trying to explain the elevated gamma globulin as a Coombs antibody, and I don't know why they would think of that. Maybe they were trying to investigate the anemia further. There are no comments about sickling, but I can't quite see how sickling would

have anything to do with the problem in a 68-year-old man.

"The blood cultures were negative. He had been treated before he came to the hospital. How long before, what antibodies, how much or for how long we don't know, but he had been treated so that the absence of positive blood cultures does not mean that he did not have a blood infection, or had not had a blood infection.

CHEMISTRIES

"His chemistries can be grouped under those related to the liver and those related to the kidneys. The liver chemistries showed abnormalities not in the total protein but in the relationship of albumin to globulin. The albumin was depressed significantly. I am a little surprised that it could be that low and there not be any edema. Somewhere along the line I got the idea that an albumin level below about 3 gm. per cent is likely to be associated with edema, and this has worked out pretty well in my experience. This was lower than that and was not associated with edema. The albumin can be decreased in anything from starvation to malabsorption to excessive excretion in the GI tract, excessive excretion through the kidneys, or ineffective manufacture in the liver. We can put our hands on none of these specifically, but a decrease in albumin is a pretty nonspecific accompaniment sometimes of chronic disease. I suspect that explains the situation here.

"These same comments apply to globulin. Globulin is never decreased as albumin is never increased. Increase in globulin is a nonspecific phenomenon which can be associated with infections, neoplasia, or what not. It is tremendously increased in multiple myeloma. This is the disease in which one expects to find a very high serum globulin level but on the other hand it doesn't have to be high to make a diagnosis of multiple myeloma, and this is a possibility here. The high globulin is also nonspecific.

"The SGOT at 52 is borderline. This is elevated by definition but only one figure is given. The range in the method is considerable. Maybe it is elevated and maybe it is not. This goes along with the equivocal jaundice that was mentioned in the history. The alkaline phosphatase is near the upper limits of normal. His total bilirubin is near the upper limits of normal. His electrophoresis doesn't add anything. His cephalin flocculation test was 2+. His thymol turbidity was near the upper limits of normal. Perhaps he has some involvement of his liver. It is probably not due to congestive heart failure since there is no reason to believe that he has had right-sided heart failure. He may have liver disease as part of the diffuse disease we are coming to.

"His BUN and creatinine were both elevated significantly. I think that this probably means he had kidney trouble. He didn't have hypertension. There wasn't much albumin in the urine, and he didn't have red cells. I think that we can effectively eliminate glomerulonephritis. Obstructive uropathy is a possibility, of course, either through some abdominal mass associated with suprapubic dullness or lymphomata or benign prostatic hypertrophy. In view of what comes later, perhaps there was some infiltrative process in the kidneys themselves influencing tubular secretions? I think he got renal involvement with whatever it is that he had.

"Blood glucose doesn't help us and his miscellaneous bacteriology is all negative and doesn't help. His VDRL is not given, but I don't think it would influence our thought very much. I am a little surprised that they didn't have any electrolytes recorded, but I don't think that they are leaving out the electrolytes to make the matter more difficult because I don't know how they would help specifically. His EKG to nobody's surprise was interpreted (and correctly I might add) as showing nonspecific ST-T wave abnormalities.

"I think we should ask Dr. Sloan to discuss his x-rays now, and I want to ask him specifically if they do show any holes anywhere in the bones that don't belong there."

X-RAY DATA

Dr. Robert Sloan: "The patient had a routine chest film which shows nonspecific enlargement of the cardiac silhouette. The aorta is moderately dilated and tortuous, but the pattern is not out of proportion to what is frequently seen in people of this age. From this routine film, therefore, one would not be suspicious of specific aortic pathology. These changes in the lungs can be explained on the basis of congestive failure. There is nothing to clearly indicate superimposed pneumonitis or tumor. The visualized bony structures appear normal. The patient also had a GI series and a barium enema. These were interpreted as normal, and in going over the films I can detect no pathology."

Dr. Blake: "Thank you. The report described in the protocol I believe said either congestive or pneumonitic changes in the lungs. His course can be discussed briefly. He was afebrile but with

tachycardia, not very impressive tachycardia but tachycardia. He was treated for cough and congestive heart failure and anemia and with meprobamate. He was catheterized and only 200 ml. of urine was found. There is no statement as to what happened to the suprapubic dullness or the periumbilical noise either at that time or subsequently. When the catheter was removed, he voided without difficulty, which is pretty much against his having much benign prostatic hypertrophy to explain his azotemia on the basis of obstructive uropathy at that level. His lungs cleared and this suggests that the treatment for congestive heart failure was effective or that any infection that may have been present there cleared up of its own accord or on the basis of treatment given before he was admitted because he was not given further treatment for infection in this hospital. These recurrent attacks of dyspnea are not described any further and he died in one of them. No mention is made of angina or syncope, other characteristics often associated with aortic valvular disease, and I assume that neither of these was present.

DIFFERENTIAL DIAGNOSIS

"Now we will get down to discussion. I divide his symptoms and findings into two sets which are related—first the cardiac lesion and second his terminal illness other than the sudden death. His terminal illness was the four month illness for which he was admitted to the hospital From the description in the protocol he had aortic regurgitation. The only reasonable alternative to aortic regurgitation I can think of is some form of AV fistula which is not described and so we can't diagnose it. Aortic regurgitation is described and I think we have to diagnose that. The possible etiology I have discussed. I don't know what the etiology was, and I doubt that we will know after this autopsy has been reported.

"The question that this aortic regurgitation needs to bring up is what relation it had to the other illness—this four month wasting disease for which he was admitted. It could be a part of that disease. It could be that he had no aortic valvular disease prior to the onset of this illness. This would mean that the illness was due to infection of the aortic cusp with a virulent type bacterium or micro-organism of some sort. The specific one that one thinks of first is a *Staphylococcus aureus*. Pneumonococci, gonococci, and so forth are even less likely. If he had such a disease which precipitated the onset of aortic regurgitation abruptly at his age, I do not think his course would have been what was described. I think that he would have gone into failure quickly and died and that this would not have explained the rest of his complaints, and therefore I do not think that his aortic regurgitation was a part of the disease which we are discussing.

"He might have had an endocarditis grafted on a pre-existing valvular lesion. This is possible. I can not say he did not have it. The absence of any of the things that we associate with bacterial endocarditis specifically is, of course, against it. There is a maxim which Dr. McDuffie mentioned recently and which I think I have heard Dr. Allison mention earlier, and that is that patients who have bacterial endocarditis in the presence of renal disease with azotemia will not have fever. Also, it is worth pointing out again that one of the most difficult aspects of the diagnosis of relatively low grade bacterial endocardial disease in any circumstances is that patients may not have detectable fever or that they may not have much fever. They may not have any leukocytosis either (and we still do not know whether this patient had leukocytosis or not). Bacterial endocarditis complicating pre-existing aortic valvular disease is a distinct possibility which I will not be able to dismiss specifically.

"This may just have been two diseases. This man who had aortic regurgitation may have gotten this other disease and died of it. Before I learned about the absence of adenopathy and the presence of a normal differential, this was at the top of my list. He had aortic valvular disease, then, with regurgitation and perhaps anatomic stenosis as well—due to undetermined cause. Calcific is the term most likely to be applied to it, presumably rheumatic in origin, remotely possibly luetic. His sudden death, incidently, it should be mentioned here was due to whatever a sudden death is due to in aortic valvular disease. This is a characteristic of this disease which has to be reckoned with whenever one deals with it. There is no specific basis for saying that he had a myocardial infarct, none for saying that he had a massive pulmonary embolus, and there are just not many other things that would produce this sort of death. Either of these, of course, could have been what terminated his course.

"Second, there was a four month illness superimposed on his aortic disease and characterized by weight loss, sweats, and low grade fever and associated with a moderate anemia, hypoalbuminemia, hypoglobulinemia, and azotemia.

"The big difficulty in diagnosing bacterial endocarditis as the basis of this disease is that it still

leaves the renal lesion undiagnosed, or the basis for his azotemia still isn't apparent.

DISCUSSER'S DIAGNOSIS

"Neoplasia was my first choice, and I suspect still is my first choice. Multiple myeloma could do the whole thing, but it can't be diagnosed on the data at hand. Neither can we diagnose anything else from the data at hand. Lymphoma was a possibility, and lymphoma would have to involve the kidneys and perhaps the liver. Without any nodes or any evidence on the GI series of masses in the abdomen, this is unlikely. I include leukemia when I say lymphoma. Some other diffuse disease such as lupus erythematosus is a possibility. I can't imagine syphilis explaining the whole situation. We have not enough information to consider tuberculosis very seriously.

"I don't know what he had. I choose to say he had aortic valvular disease and a chronic wasting disease, probably neoplastic, with multiple myeloma as the most likely choice and with bacterial endocarditis as the second. Dr. Allison has promised to say a few words."

Dr. Fred Allison: "Dr. Blake asked me to comment on whether or not this illness was due to bacterial endocarditis. There was a history of having had fever and a heart murmur was heard. The only thing that is lacking for a diagnosis of endocarditis is prominent evidence of embolism. I think it is certain that he had renal disease, and it could have been on an embolic basis. Under this circumstance one could say that it fits. Unfortunately, the usual manifestations of embolism may be lacking.

"Dr. John Jackson found in cases of bacterial endocarditis reviewed here several years ago that fever may not be prominent in older age groups and in patients with azotemia. If he had bacterial endocarditis according to Dr. Jackson's criteria, there were a number of things which indicated that the prognosis was poor and one of the most prominent ominous findings was a significant azotemia. Patients with abnormal EKG's, even though the changes often were nonspecific, had a high fatality rate. Finally, patients with wide open or dynamic aortic insufficiency also died more frequently. All of these things this patient had."

AUTOPSY REPORT

Dr. Joel Brunson: "Well, as a matter of fact this is bacterial endocarditis. I would like to point out though that it definitely is not a syphilitic valvular disease, as the criterion for syphilitic aortitis is separation of the commissures and these are moderately close together in all of the cusps. The disease of this valve was peculiar in that it was superimposed on a normal valve with normal cusps, in that it involved each of the three cusps, and in that it did not involve free margins of the cusps. It was implanted near the base ring of the valve in each instance and in each instance there was perforation of each cusp of the aortic valve. We believe that can amply account for his regurgitation.

"Now when this occurred is another question. Whether this is of four months' duration is difficult to say. I believe that it probably is. Why he didn't have a positive blood culture is just a little bit more difficult to explain. Perhaps previous antibiotic therapy had something to do with it. We did culture the valves at the time of postmortem examination and these grew out of what we think is a contaminant *Escherichia coli*. These vegetations were quite firm and suggested that there has been some organization going on for quite awhile.

"The heart was really not tremendously enlarged. It weighed something over 500 gm. and did have a marked left ventricular hypertrophy. The lungs showed passive congestion with some edema, not a great deal, and I would again reemphasize what Dr. Blake has said that the cause of death in patients who have aortic valvular stenosis or insufficiency is certainly not at all clear. Sudden death is not uncommon in those patients. There does not appear to be enough evidence of acute failure, that is pulmonary edema, to suggest purely a functional basis.

"There was hypertrophy of the median lobe of the prostate protruding up into the cavity of the bladder. There was, however, amazingly little evidence of pyelonephritis or hydronephrosis. He did have a renal lesion which I like to think was probably related to the bacterial endocarditis and that was a proliferation of endothelial cells with some swelling of the glomeruli and in numerous glomerular capillaries there were fibrin thrombi. This lesion, that has been called focal embolic or thrombotic glomerulonephritis is not thought now to be on the basis of emboli but most likely a development of sensitivity to the infecting organism in the heart so that it appears to be formed in situ. This I believe would explain his evidence of renal impairment.

"Amazingly, there were no other emboli, no infarcts in the spleen. The spleen was not enlarged. The liver did show fairly severe passive congestion. So one only can wonder why he didn't have

peripheral edema as evidence of right ventricular failure. Certainly he had microscopic evidence of right ventricular failure in the liver. This I believe could explain his liver findings. Well, this is an intriguing case, Dr. Blake. What do you think about the localization of the organisms, the degree of morphologic change, and yet the amazingly little evidence of clinical infection?"

Dr. Blake: "I agree that it is intriguing. I asked Dr. McDuffie to comment. He said, 'well, it is obviously bacterial endocarditis.' He was right. All I can say is that I have made the same mistake again. My line of thought was interrupted by his not responding like I said he would have responded if this had been a result of the acute disease which brought him in. I would think that a man who at his age suddenly developed such an aortic regurgitant lesion would go into left ventricular failure. I think that he didn't is a remarkable testament to the reserve that some people's hearts have and can be described as an example of cardiac success." ★★★

2500 North State St.

REFERENCES

1. Jackson, J. F., and Allison, F., Jr.: Bacterial Endocarditis, South. M. J. 54:1331, 1961.

NIGHT BAWL

Dr. Edwin Patton, a Beverly Hills, Calif., pediatrician, was awakened at 2:00 a.m. by a call from an obviously alarmed mother.

"I'm sorry to call at this hour," she sobbed, "but please, doctor, can you possibly come immediately?"

Assured that an emergency existed, Dr. Patton dressed, drove to the patient's home, and climbed three flights of stairs. The mother hurried him into the bedroom of a bawling child.

Pointing an accusing finger at her baby, she yelled, "See! I told you I'd call the doctor if you didn't stop crying."

—*Parade Magazine*

Radiologic Seminar XXVIII: Amebic Colitis

ROBERT R. SURRATT, M.D.
Jackson, Mississippi

AMEBIASIS RESULTS from infestation by the protozoan, *Entamoeba histolytica*. Each orally ingested viable cyst of *E. histolytica* breaks up within the alkaline small bowel contents into eight motile trophozoites. Showing little affinity for the small bowel, trophozoites invade and ulcerate the colon mucosa by a combination of pseudopodal motion and a cytolytic secretion. The muscularis mucosa seems to resist further invasion, but secondary bacterial infection produces deeper tissue destruction and a granulomatous response. Large granulomas called amebomas can develop. The most common extraintestinal extension is by the portal vein to the liver and on to pleura and lung. Reports are found of involvement of almost all organs.

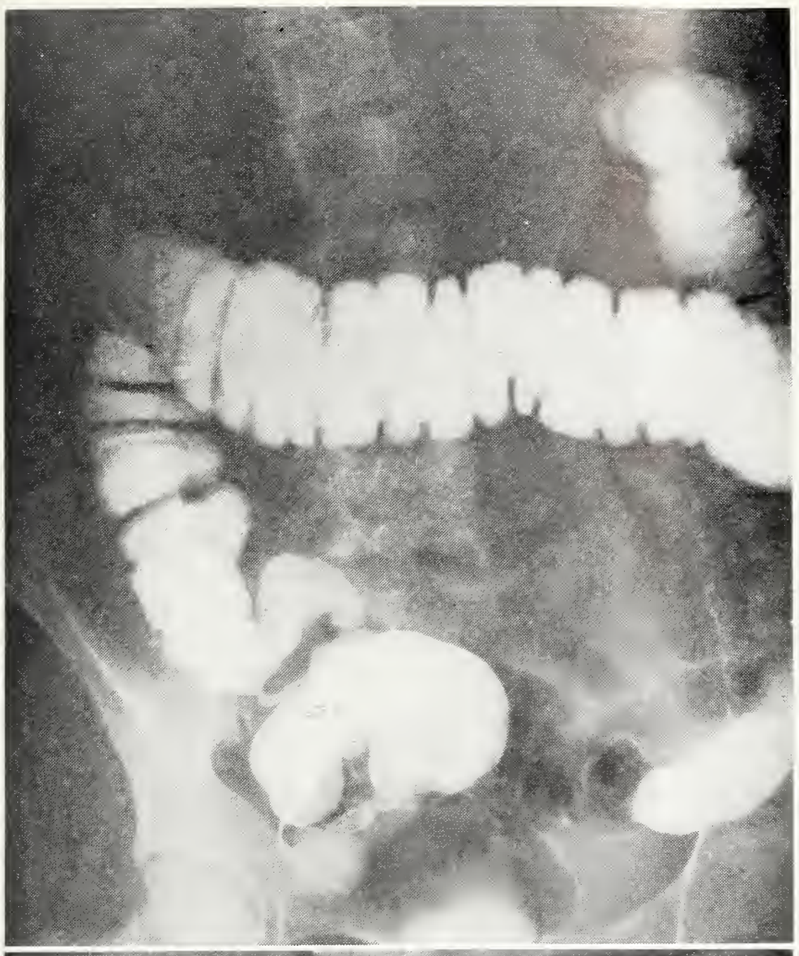
Usually amebic colitis is chronic although acute fulminating cases occur. These acute, often fatal cases show widespread mucosal erosion and perforation before a fibrotic response develops. Symptomatology of more chronic forms ranges between asymptomatic carriers and patients with varying degrees of fever, chills, diarrhea, melena, flatulence, abdominal pain, and even constipation. Management of all patients is primarily medical. Surgical intervention in the untreated patient, even with perforation, may carry high mortality.

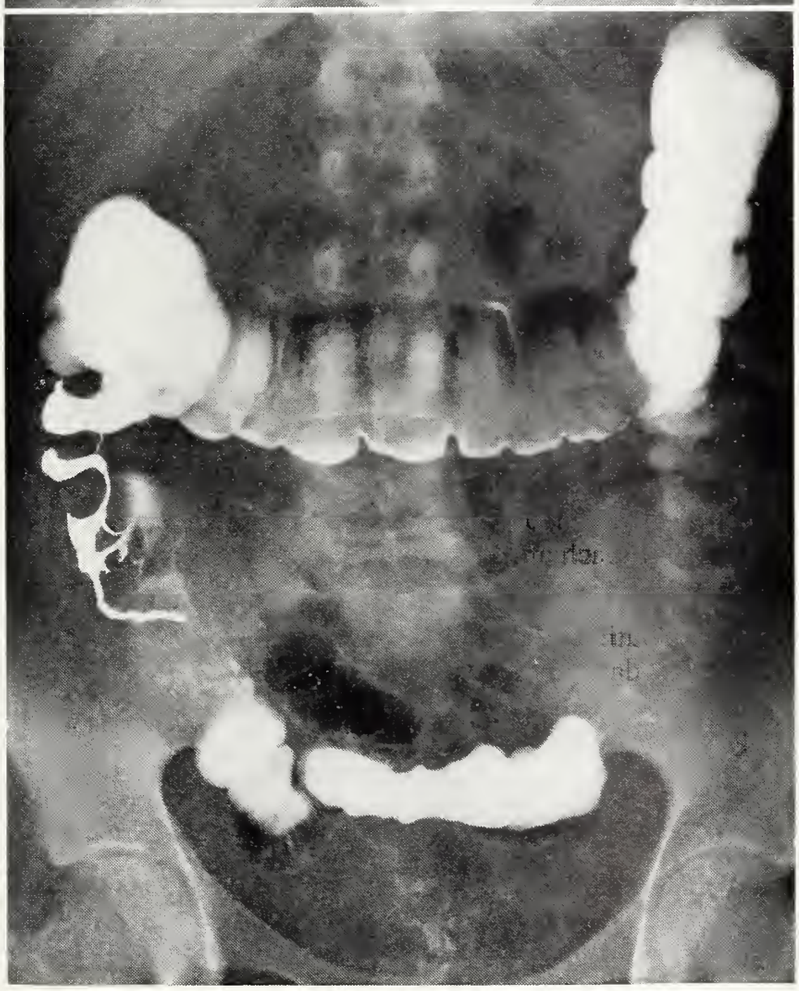
Diagnosis depends upon multiple skilled microscopic examinations of stools and stool concentrates or cultures for the cysts and trophozoites of *E. histolytica*. Examination of scrapings or a biopsy of ulcers observed by sigmoidoscopy may also prove the diagnosis. Complement fixation tests are of more value in extra-intestinal amebiasis.

Roentgen studies in fulminating colon disease are impractical except to confirm perforation. In other forms of amebic colitis the incidence of positive findings in barium enema studies is not high. Characteristically there are often multiple sites of involvement, usually of the dependent portions of the colon such as the cecal region, rectosigmoidal area and the mid-transverse colon. The spasm and irritability of early mucosal erosion may be indistinguishable from that produced by preparatory enemas. With greater involvement, areas of narrowing and shortening of variable length are found. Probably the most frequent lesion is a short

Figure 1. A schematic drawing outlining the contour of the cecum, appendix, and terminal ileum as seen on the filled barium enema films of a 26-year-old white female with a three months' history of fever, abdominal cramping, and diarrhea with mucus and occasional blood. Stools contained E. histolytica trophozoites and cysts. The dotted line indicates the contour of a normal cecum.

Sponsored by the Mississippi Radiological Society.





contracted cecum with a readily patent terminal ileum. The ileum is rarely involved but may be dilated. In the differentiation of colon lesions, it should be pointed out that tuberculosis involves both the terminal ileum and cecum and open pulmonary cavities are usually present. Carcinoma of the colon more often has a palpable mass and is a single lesion. It should be stressed that positive barium enema findings do not establish a diagnosis of amebiasis without laboratory confirmation and that a normal barium study does not exclude amebiasis. ★★★

4531 Brook Dr.

REFERENCES

1. Weber, Harry M.: Roentgenologic Identification of Commonly Encountered Chronic Ulcerative Diseases of the Colon, Am. J. Roentgenol. 30:488-496 (Oct.) 1933.
2. Golden, Ross, and Ducharme, Paul: The Clinical Significance of Deformity of the Cecum in Amebiasis, Radiology 45:565-580 (Dec.) 1945.
3. Cahill, Kevin M.: Amebiasis, New York J. Med. 63:2247-2252 (Aug. 1) 1963.

Figure 2. A filled film of the colon from a barium enema in the same patient as Figure 1. Note the short contracted cecum and readily patent terminal ileum.

Figure 3. An evacuation film from the barium enema study, again showing the distorted cecum. (Retouched for purposes of illustration.)

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Meeting, Nov. 29-Dec. 2, 1964, Bal Harbour, Fla. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn, Chicago 10, Ill.

American College of Surgeons, Clinical Congress, Oct. 5-9, 1964, Chicago. Samuel P. Harbison, Secretary, 40 East Erie, Chicago 11, Ill.

Southern Medical Association, Nov. 16-19, 1964, Memphis, Tenn. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 10-13, 1965, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday January, First Wednesday March, May, July, September, November. Charles D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March, June, September, and December. William E. Riecken, Jr., P. O. Box 831, Kosciusko, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday April and October, Oxford. Vernon B. Harrison, P. O. Box 36, University, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucius Olen Crosby Memorial Hospital, Picayune, Secretary.

South Central Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.

Proceedings of the House of Delegates

96th Annual Session
May 11-14, 1964
Jackson, Mississippi

THE 61ST ANNUAL SESSION of the House of Delegates was convened during the 96th Annual Session of the Mississippi State Medical Association, in pursuance to lawful notice given, on May 11, 1964, in the Victory Room of the Hotel Heidelberg, at Jackson, Mississippi, at 1:30 o'clock in the afternoon, by Dr. John G. Archer, the President. The invocation was spoken by the Rev. Earl C. Presley, Pastor of the Clinton Methodist Church, Clinton, Mississippi.

After extending greetings, Dr. Archer presented the Vice Speaker of the House of Delegates, Dr. Howard A. Nelson of Greenwood, and the Speaker, Dr. B. B. O'Mara of Biloxi, who assumed the chair. Dr. C. G. Sutherland, Chairman of the Reference Committee on Credentials, reported the presence of a quorum of registered and seated delegates in accordance with Section 3, Chapter V, By-Laws of the association.

APPOINTMENT OF TELLERS AND SERGEANTS-AT-ARMS

Clyde A. Watkins, Sanatorium
James T. Thompson, Moss Point
Byron Mayo, Drew

ANNOUNCEMENT OF REFERENCE COMMITTEES

Reports of Officers and Board of Trustees
- S. Lamar Bailey, Kosciusko, Chairman
- Jo N. Robinson, Columbus
- Victor E. Landry, Lucedale
- W. L. Jaquith, Whitfield
- G. Swink Hicks, Natchez

Medical Practices
- George E. Twente, Jackson, Chairman
- W. W. Walley, Waynesboro
- William A. Middleton, Winona
- Mal S. Riddell, Winona
- W. M. Dabney, Crystal Springs

Miscellaneous Business
- Lamar Arrington, Meridian, Chairman
- John G. Egger, Drew
- John Y. Gibson, Centreville
- Jack A. Stokes, Pontotoc
- A. K. Martinolich, Jr., Bay St. Louis

Credentials
- C. G. Sutherland, Jackson, Chairman
- Dennis E. Ward, Corinth
- James O. Gilmore, Oxford

Rules and Order of Business
- C. D. Taylor, Jr., Pass Christian, Chairman
- J. T. Davis, Corinth
- A. Street, Vicksburg

REPORT OF THE REFERENCE COMMITTEE ON RULES AND ORDER OF BUSINESS

To assist the Speaker and Vice Speaker in the orderly conduct of the proceedings of this House of Delegates, your Reference Committee on Rules and Order of Business makes the following recommendations:

Conduct of Business. The Speaker and Vice Speaker should prescribe the order of business as set out in the By-Laws and it should be conducted in accordance with *Robert's Rules of Order, Revised.* All delegates recognized should identify themselves. Except for distinguished visitors and those having official capacity with the association, unanimous consent should be obtained for extending floor privileges to nonmembers of the House. The report of the Reference Committee on Credentials should constitute the formal roll call.

Reports. Except for those reports and resolutions requiring no further consideration after presentation, all should be referred to the appropriate reference committee for hearing, and debate should be reserved until these hearings and when they report to the House.

Resolutions. To avoid burdensome tasks upon the reference committees, as well as to insure all the opportunity to discuss their views during appointed hours of hearings, we recommend that no resolutions be accepted after the present meeting except for (1) matters of an emergency nature, such emergency to be determined by majority vote, (2) matters relating to a scientific section or scientific work, and (3) proposed amendments to the Constitution or By-Laws which must lie on the table for one year.

The report of the reference committee was adopted.

ADOPTION OF TRANSACTIONS

On motion by Dr. Stanley A. Hill of Corinth, seconded by Dr. J. P. Culpepper, Jr., of Hattiesburg, the Transactions of the 60th Annual Session of the House of Delegates, 95th Annual Session of the association, Biloxi, May 13-16, 1963, published in Volume IV, Number 8, JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION, August 1963, were adopted.

REMARKS OF THE SPEAKER

Dr. B. B. O'Mara: Your Speaker and Vice Speaker extend to each member of this House of Delegates a cordial and fraternal welcome. We are convened to discharge substantial responsibilities, to meet effectively the challenges before us, and to address ourselves to the conduct of medicine's business. We have every opportunity to make this annual session the best in our 108 years of association history, and I believe that we will.

Especially do we welcome new members of this deliberative body. Their presence tells us many things: It reminds us that the growth of the profession in Mississippi is real and viable and that our capabilities for more and better medical care are thus expanding. Our new colleagues will soon see that this is a busy House and that our responsibilities as our association's policy-making body are great. What we do here, what we say here, and what we decide here can and will affect the health of Mississippians. Each of us is dedicated to the proposition that these actions will be beneficial and consistent with our purpose and goals.

Your Speaker and Vice Speaker respectfully ask that you seek the simple, direct parliamentary procedure. Few useful purposes are served when our deliberations become snarled in a maze of complex questions. Each will be heard and accorded full rights and privileges which belong to every member. We will endeavor to be fair and impartial—and always respectful—in dealing with each member from this rostrum.

It will be our purpose to assure the rights of the minority while proclaiming the will and decision of the majority.

The chair will ask that all reports to this House be read by the officer or chairman responsible for their presentation. These reports represent hundreds of hours and dozens of days of labor by officers, Trustees, councils, and committees in our service. They have prepared for us the essence—the lean without the fat—of many, many, pages of agenda, studies, reports, exhibits, and minutes. Each deserves the respectful hearing which your Speakers know you will wish to accord it.

For the most part, debate is reserved for hearings in the several reference committees. Plan to attend them and to participate in constructive discussions which will assist your association in its many tasks.

Let us now be about our businesss of representing to the best of our individual and joint abilities our profession and our association as we review the stewardship of the year and plan for a future of service.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Each member of the House of Delegates appreciates the competent and sincere manner in which the business of this body is conducted by our Speaker and Vice Speaker. In approving the remarks of the Speaker, we add our commendation of Dr. O'Mara and Dr. Nelson.

The report of the reference committee was adopted.

OPEN SESSION OF THE HOUSE OF DELEGATES

The House of Delegates entered upon open session during which various distinguished guests were presented by the Speaker.

ADDRESS OF THE PRESIDENT

The President of the association, Dr. John G. Archer, delivered his address to the House of Delegates. The address has been published separately in Volume V, Number 7, JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION, July 1964.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your reference committee heartily and enthusiastically commends our President, Dr. John G. Archer, on his splendid address to this House of Delegates. We subscribe to his viewpoints and we believe that each member of our association should carefully consider the sincere message contained in this paper.

We believe it important to re-emphasize the theme:

"By tacit common consent, a substantial segment of the American medical scientific community seems to have resigned itself to the belief that only the federal government can finance its ongoing activity in education, research, and the extension of medical care resources."

We feel that Dr. Archer has raised an important question which affects not merely the scientific community but the public as well. Your reference committee approves the address of the President and in commending him for his energetic and diligent service to his association, we express the hope that his address will be published in our JOURNAL.

The report of the reference committee was adopted.

SPECIAL ADDRESS

The principal speaker of the 96th Annual Session, Dr. Edward R. Annis, Miami, Fla., President of the American Medical Association, addressed the House of Delegates.

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

Dr. E. LeRoy Wilkins: Pending Amendments. At the 95th Annual Session in 1963, two amendments to the By-Laws were introduced on the final day to lie on the table until the present annual session. No amendments to the Constitution are pending. The By-Laws amendments are:

Committee on Medicine and Religion. The House of Delegates authorized appointment of a Committee on Medicine and Religion as an *ad hoc body* of the Board of Trustees and permitted introduction of an amendment which proposes to make the committee a constitutional body. If adopted, the amendment would add a new section to Chapter X of the By-Laws:

"Section 5. Committee on Medicine and Religion. The Committee on Medicine and Religion shall consist of six members for terms of three years each and so arranged to provide for appointment of two members annually. The committee shall be responsible for formulating a program in the field of medicine and religion and for carrying out such assignments as may be made in this connection by the Board of Trustees."

It will additionally be necessary to amend Section 1, Chapter X, to add the words "the Committee on Medicine and Religion."

Procedural Amendment. The second amendment now pending would change the first sentence of Section 2, Chapter V, which now reads: "The House of Delegates shall meet annually on the first day of the annual session of the association, and there shall be at least one scientific meeting scheduled that day" by substituting a period after the word "association" and deleting the remainder of the sentence. The purpose of the amendment is to bring the By-Laws into conformity with the prevailing practice of conducting the House of Delegates on Monday afternoon.

Notices to the Membership. Both proposed amendments were published in the JOURNAL MSMA in the August 1963 issue. Additionally, letters in this connection were sent to the secretaries of the component medical societies on March 3, 1964. It is recommended by your council that all interested delegates appear before it to discuss their views on the pending amendments at the scheduled and announced hearings published in the official program.

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

The report of the Council on Constitution and By-Laws was considered and discussed in open session. This report proposed amendment of Chapter X, By-Laws MSMA by adding "Section 5. Committee on Medicine and Religion," and amendment of Section 1 by adding the words "the committee on Medicine and Religion." The Council also proposed amendment of the first sentence of Section 2, Chapter V, By-Laws MSMA, to read "The House of Delegates shall meet annually on the first day of the annual session of the association," thus conforming the By-Laws with the prevailing practice of conducting the House of Delegates on Monday afternoon.

The consensus of opinion was in favor of these amendments and your Council recommends adoption of this report.

The report of the council, acting as a reference committee, was adopted.

REPORT OF THE BOARD OF TRUSTEES

Dr. John B. Howell, Jr.: Organization and Duties. The Board of Trustees is the executive and governing body of the association during vacation of the House of Delegates. It is responsible for

management and policy direction of all phases of association activity. In the discharge of these duties and responsibilities, the Board conducted formal meetings during May, August, and December of 1963 and in March, April, and May of 1964. This annual report relates to management, policy functions, and Board-supervised programs deemed important to the membership and to this House of Delegates.

Referrals and Ongoing Projects. Matters before the 95th Annual Session in 1963 and ongoing projects in which the Board had responsibilities are:

(a) *Interprofessional Code.* The interprofessional code for Mississippi physicians and attorneys was approved by the House of Delegates at the 95th Annual Session. It has since been published in leaflet form as a joint project of the association and Mississippi State Bar and distributed to each member of the two professional associations.

(b) *Teaching Programs in Charity Hospitals.* Two reports in this connection were adopted at the 1963 annual session. The Council on Medical Service will report studies and recommendations at the present meeting.

(c) *Medicine and Religion.* Supplemental Report I of the Board of Trustees was adopted in 1963, and an *ad hoc* Committee on Medicine and Religion was appointed by the Board. The committee has been concerned with organizational, orientation, and liaison activities. A program to increase communication between physicians and clergymen has been planned and approved by the Board for the 1964-65 association year. The original essays presented before our Seminar on Medicine and Religion at the 95th Annual Session were published in a special issue of our JOURNAL MSMA in September 1963. Pending before the House at the present meeting is a proposed amendment to the By-Laws which would make the Committee on Medicine and Religion a constitutional body.

(d) *Loss of Narcotics Stamps.* Action by the AMA House of Delegates on the resolution in this connection which was introduced after action at our 1963 annual session is reported by the AMA Delegates.

(e) *Relations with the Mississippi Hospital Association.* Proposed guiding principles for relations between the state medical and hospital associations are the subject of a separate supplemental report.

Committees of the Board of Trustees. At the present reporting, the Board is assisted in its work by three constitutional and five *ad hoc* committees. Four of the eight councils are responsible to the Board for reporting purposes.

(a) *Advisory Committee to the Medical Auxiliary.* This three member constitutional body functions as the association's official advisory and liaison mechanism with Auxiliary officers and groups. At various times, its members counsel with and appear before Auxiliary meetings.

(b) *Grievance Committee.* This constitutional committee has representatives from each of the nine association districts. Functioning primarily in an appellate capacity, the committee reported seven cases monitored and one case submitted for advice during the 1963-64 association year. The Board notes with satisfaction that the committee was not called upon to assume original jurisdiction nor to sit in an appellate capacity. This reflects favorably upon local society grievance committees and their effectiveness in resolving misunderstandings at professional community level.

(c) *Committee on Publications.* This six member constitutional committee consists of the editor, the two associate editors, and three members appointed by the Board. In supervising production and publication of our JOURNAL, the committee continues to be active and renders valuable service. Your JOURNAL is in its fifth year of publication and enjoys an excellent reputation as a member of the American scientific press.

The declining trend in ethical advertising continues to be a matter of concern for all medical scientific publications. Although advertising declined during 1963, the editorial and scientific content was virtually identical to that of the preceding year. Contents quality, the Board feels, was improved. The number of major scientific articles, news items, and features was increased over 1962. Our JOURNAL serves usefully in regular feature presentations, and your Board of Trustees, on recommendation of the committee, authorized award of a special certificate of commendation to the Mississippi Radiological Society for contribution of the monthly radiologic seminar.

The circulation of the JOURNAL has increased slightly, and in addition to members, senior medical students, interns, and residents in Mississippi, it is received by libraries at all 87 approved American medical schools, by many individuals, and by varied organizations in all 50 states, Canada, and 15 foreign nations of the free world. The Board commends the editors and committee for their superb service and thanks the authors and readers

who have supported the JOURNAL so loyally. The Board is happy to announce that the JOURNAL won its fourth national award for excellence in 1963.

(d) *State Medicare Review Board.* This *ad hoc* committee has duties specified in the formal contract with the Department of Defense as relates to the Dependents' Medical Care Program. The association functions as both contractor and fiscal administrator for professional care aspects. During 1963, the program remained stable, holding the high level of a 56 per cent increase experienced in 1962. Payability of claims from physicians remained at 95 per cent, and necessity and frequency for formal reviews decreased 33 per cent from 1962, a tribute to participating physicians. Your Board of Trustees commends the Review Board which meets frequently and serves without expense reimbursement or compensation.

(e) *Robins Award Board of Judges.* The three vice presidents, elected by the House, serve as judges for this award. The third annual recipient will be announced and the award presented during the present annual session.

(f) *MSMA-Mississippi Hospital Association Liaison Committee.* The work of this body is the subject of a separate supplemental report.

(g) *Committee on Legislative Liaison.* This *ad hoc* body consists of at least one physician in each county and serves as the association's local legislative communications representatives. The committee was reactivated as a result of action at the 1963 annual session and has functioned effectively.

Legislative Activities. Both national and state legislation were major undertakings and fields of endeavor for the Council on Legislation and the Board of Trustees.

(a) *National Legislation.* Major enactments in the health and medical field by the Congress during the present session include the two mental retardation and mental health facilities measures and the federal aid to medical education proposal sponsored by the administration. Your state medical association was the only such organization to present testimony to the Congress in opposition to the latter. Additionally, testimony was presented during the November 1963 and January 1964 hearings on the pending King-Anderson fedicare bill, H.R. 3920.

(b) *State Legislation.* The 1964 Regular Session of the Mississippi Legislature convened January 7, reapportioned for the first time since 1890. The House of Representatives consists of 122 members and the Senate, of 52 members. Approximately 100 bills with health and medical implications have been followed with policy positions assumed on about 20. House Bill 624, a proposal to grant sanction and licensure to the cult of chiropractic, was introduced April 6 by nine members of the House. It has been vigorously opposed in accordance with long standing policy. Implementation of the Kerr-Mills program has been sought with measures sponsored before the House and Senate. On April 27, H.B. 705, full implementation of the program, was passed by the House. Release of privileged information for scientific studies intended to reduce morbidity and mortality has also been a legislative objective of your association.

A full and complete report on the 1964 Regular Session is not possible at the present reporting but will be subsequently made after opportunity to review the work of the Legislature has been available to the Council on Legislation. Your Board of Trustees commends this council and all who have devoted so much time and energy to this important activity.

(c) *Emergency Medical Care Unit.* As directed by the House of Delegates in 1963, an Emergency Medical Care Unit was established in the New Capitol Building and operated by your association during each legislative day. A graduate registered professional nurse, Mrs. Ila G. McCleave of Jackson, was employed as an association staff member to serve the unit. Equipment and necessary supplies were obtained, and the Board formally thanks Kay Surgical, Inc., of Jackson and Memphis and the Patterson Drug Stores of Jackson for important contributions and assistance in this connection. Through this reporting, more than 60 members of the association from almost as many different communities have either served or are scheduled to serve as Doctors of the Day. Both houses of the Legislature adopted resolutions commending your association for this service, and the Governor, Lieutenant Governor, and Speaker sent separate expressions of commendation. Your Board of Trustees feels that this project has been most useful in the public service field.

Political Action Committee. Following action at the 95th Annual Session authorizing and directing the Board to organize the Mississippi Medical Political Action Committee, special legal studies were made and MPAC was organized as a nonprofit, non-partisan, voluntary, unincorporated political action committee in a manner legally consistent with Sections 302 and 610 of the Federal Corrupt Practices Act. The PAC is operated under a constitution and by-laws and policy guides approved by the Board of Trustees, and it was formally organized on September 19, 1963,with a 10

member Board of Directors consisting of nine physicians and a member of the Woman's Auxiliary.

The initial work of MPAC has been in the area of membership solicitation, and the Board of Trustees urges all members of the association and Auxiliary to identify themselves with this organization. The PAC maintains close liaison with AMPAC. Its current officers are Drs. George E. Twente of Jackson, chairman, and Howard A. Nelson of Greenwood, secretary-treasurer.

Chester Case. The case styled *State Board of Optometry v. Charles Chester* was tried in Chancery Court in Lauderdale County, and your association intervened as *amicus curiae* since ophthalmologists had an interest in the outcome. About four years elapsed between the filing of the suit and the decision. The defendant was enjoined against the unlawful practice of optometry, but since he was alleged to have acted as an independent agent, the decree does not and apparently will not affect the practice of medicine by ophthalmologists. The Board commends our legal counsel, Hon. Carl C. Bostic of Jackson, for his diligence in the case, his able legal research, and splendid brief to the Court.

Other Activities. The Board has coordinated association support of the Cornell University Automotive Crash Injury Research project. Cooperating agencies and organizations included the State Board of Health, the Mississippi Hospital Association, the Mississippi Highway Safety Patrol, and the state medical association. Progress reports with respect to study areas were published in your JOURNAL. The association's various insurance groups were improved, and the group life program experience was such as to permit premium rate reductions. Under a revised procedure, the annual association budget was considered at the spring meeting of the Board, and the recommendations of the Council on Budget and Finance were approved. The Board lent its good offices to assisting the state of Mississippi in improving the medical service facility at the Parchman state penitentiary, making specific recommendations to the Governor after authorizing an inspection visit and seeking the advice and recommendations of the Council on Medical Service.

Membership of the Board. It is with profound regret that your Board announces that on August 1, 1963, our chairman, Dr. H. H. McClanahan, Jr., of Columbus, experienced the onset of an extended illness which prevented his actively serving during the ensuing period. The vice chairman, Dr. John B. Howell, Jr., of Canton, has served as acting chairman. The secretary of the Board is Dr. C. D. Taylor, Jr., of Pass Christian. To assure the Board the services of the Executive Committee, Dr. Everett H. Crawford of Tylertown was elected to serve as a third member for this purpose. In order that communication between the Board of Trustees and District 3 might be maintained during Dr. McClanahan's indisposition, Dr. J. T. Davis of Corinth has served as observer from that district.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Each member of the association is deeply indebted to the Board of Trustees for their individual and joint exercise of leadership and effective service in behalf of the medical profession in Mississippi. The report of the Board outlines the work of the several constitutional and *ad hoc* committees as well as ongoing programs which were supervised by our governing body. We approve the report and recommend its adoption by this House of Delegates.

Your reference committee would be remiss in failing to add its endorsement to that given during this present annual session by the House of Delegates to the chairman, Dr. H. H. McClanahan, Jr., of Columbus, and we thank Dr. John B. Howell, Jr., of Canton for his able exercise of leadership during the current association year.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "A" OF THE BOARD OF TRUSTEES

Dr. John B. Howell, Jr.: Background. At the 95th Annual Session in 1963, your Board of Trustees reported that an *ad hoc* body, the MSMA-Mississippi Hospital Association Liaison Committee, was drafting guides for relations between the two associations. This committee consists of the president, president-elect, and chairman of the Council on Medical Service representing our association and their three counterparts representing the hospital association. Many areas of mutual interest have been usefully explored by the committee.

Guides. The document, Guiding Principles for Relations Between the Mississippi State Medical Association and Mississippi Hospital Association, was completed and agreed to by the committee in late 1963. At its December 12, 1963, meeting, the Board of Trustees approved the document and recommends its approval and adoption by the House of Delegates. We are advised that the Mis-

sissippi Hospital Association has approved it. Your Board commends the members of the committee on the part of the state medical association, Drs. John G. Archer, Omar Simmons, and Guy T. Vise, for their splendid work in this connection.

GUIDING PRINCIPLES FOR RELATIONS BETWEEN THE MISSISSIPPI STATE MEDICAL ASSOCIATION AND MISSISSIPPI HOSPITAL ASSOCIATION

Preamble

The Mississippi State Medical and Mississippi Hospital Associations are agreed that their respective and joint goals include improvement of patient care, the maximum possible conservation of life and health, and their making contributions to the fund of knowledge to increase these skills. They recognize and voluntarily accept additional roles of responsibility in education, socioeconomic study regarding medical practice and hospital management, and in seeking a climate of optimum circumstance in which to assure effective discharge of these obligations. The well-being of the patient is their first concern.

Prerogatives

Each association respects the prerogatives of the other as a member of the health care team. Hospitals recognize that only physicians can make medical judgments and direct medical care. Physicians recognize both the responsibilities and prerogatives of hospital trustees and their managements agents. Both associations understand that neither the physician nor the hospital can achieve maximum service potential without the active support of the other.

Free Choice

Free choice of physician and hospital are among those factors contributing to the best medical care. It should never be denied on the questionable premise that the patient is unable to choose intelligently for himself. Limitations imposed in this connection by laws to which either or both associations are not opposed are recognized, although such recognition is not necessarily indicative of total satisfaction with such circumstances.

Financing Medical Care

The Mississippi State Medical and Mississippi Hospital Associations believe that private initiative is an indispensable aspect in availability, quality, and quantity of health care services. Both are in thorough accord that compulsory systems of care under government programs of compulsory taxation, in whatever form, lead to a deterioration of these services. Voluntary financing mechanisms, including prepayment and insurance, are strongly supported.

Public Programs of Medical Care

Each association believes that personal health care is a responsibility of the individual. When a person is unable to provide for himself and genuine need exists, then this responsibility escalates to his family, the community, and the state, in that order. For those unable to provide for themselves and who have insufficient family resources, the associations recognize that assistance from public sources for meeting these legitimate needs is appropriate. Programs of medical care in these connections should help only those who need help and be at all times under locally exercised controls. Realistic reimbursement for the costs of such care, within the capability of state resources, should be made to the providers of health services.

Laws

Society has the right to expect and require minimum qualifications of individuals and institutions to whom care of the ill and injured is entrusted. Both associations support laws assuring that only qualified, regular practitioners of medicine and suitable hospital facilities respectively receive medical practice and service privileges. Each association recognizes and respects the duty and obligation of the other to seek improvement in laws affecting the health and well-being of the public. Each agrees that it is improper for one association to seek legislative enactments for its own advantage to the detriment of the other.

Education

Traditionally, physicans willingly participate in the training of allied professional personnel in hospitals. The latter organizes and sponsors such training programs. Each association appreciates and values its opportunity to work with the other in the joint sponsorship of educational activities on regional and state levels.

Interchange and Liaison

Modern medical and hospital management sciences have advanced to their present states of high development through free exchange of information and the sharing of new knowledge for the betterment of patient care. The medical and hospital associations encourage constructive interchange of views, ideas, and information at all levels of activity between physician and hospital. They are agreed that continuing liaison mechanisms for these purposes should exist between the two groups.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

This supplemental report sets out guiding principles for relations between the Mississippi State Medical Association and the Mississippi Hospital Association. These guides were developed by our joint liaison committee and your reference committee feels that these principles should be adopted and published to both associations.

The report of the reference committee was adopted.

DESIGNATION OF REPORTS

The designation, "Supplemental Report B of the Board of Trustees," was not used.

SUPPLEMENTAL REPORT "C" OF THE BOARD OF TRUSTEES

Dr. John B. Howell, Jr.: Background. At the 95th Annual Session in 1963, Resolution No. 2, subject: "Information on Loss of Narcotics Stamps," was adopted as amended. The resolution took cognizance of the need among various agencies and organizations for information in this connection. Additionally, your Board of Trustees has considered the matter of qualifications and eligibility for membership as relate to the use and dispensing of narcotics. Legal studies in connection with amendments to the By-Laws of the association regarding denial of membership for wrongful and irregular practices in the use and dispensing of narcotics have been considered. The Board believes, in the interest of patients whose well-being is paramount and in the interest of the vast majority of members to whom this matter has not nor will be a problem, that eligibility criteria in this connection should be strengthened.

Amendment. Accordingly, your Board of Trustees recommends that Section 1, Chapter I, By-Laws of the association, be amended by adding the following after the final sentence of the section:

"No physician shall be eligible for election to or continuation of membership who does not possess a currently effective federal narcotics stamp, provided, however, that physicians in full time government service who need no registration to use, prescribe, and dispense narcotic drugs and those who, by reason of type of practice, employment, inactivity, or retirement, neither prescribe nor dispense narcotics and who for this reason alone have not applied for registration shall be exempt from this requirement."

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

Supplemental Report of the Board of Trustees relating to eligibility for membership in MSMA, was considered by your council. This report recommends amendment of Section 1, Chapter I, of the By-Laws by adding the following after the final sentence of the section:

"No physician shall be eligible for election to or continuation of membership who does not possess a currently effective federal narcotics stamp, provided, however, that physicians in full time government service who need no registration to use, prescribe, and dispense narcotic drugs and those who, by reason of type of practice, employment, inactivity or retirement, neither prescribe nor dispense narcotics and who for this reason alone have not applied for registration shall be exempt from this requirement."

Your council concurs in this report of the Board of Trustees and recommends its adoption by this House of Delegates.

The report of the council, acting as a reference committee, was adopted.

SUPPLEMENTAL REPORT "D" OF THE BOARD OF TRUSTEES

Dr. John B. Howell, Jr.: The Tri-County Medical Society, a duly chartered component of this association, has petitioned the Board of Trustees to authorize an amendment to its charter, redesignating the society the South Central Mississippi Medical Society.

In preparing the petition, officers of this component medical society have fulfilled all requirements of the local Constitution and By-Laws and have acted in accordance with Section 1, Chapter XII, By-Laws of the Mississippi State Medical Association.

Your Board of Trustees approves this charter amendment and recommends concurrence by this House of Delegates.

ACTION OF THE HOUSE OF DELEGATES

Without objection, the report was acted upon without referral, and on motion by Dr. Howell, second by Dr. Stanley A. Hill, Corinth, the report was adopted.

REPORT OF THE SECRETARY-TREASURER

Dr. C. G. Sutherland: Duties and Responsibilities. As an elected general officer of your association, your Secretary-Treasurer is charged with the preformance of such duties as ordinarily devolve upon a secretary of a corporation by law, custom, and parliamentary usage. Additionally, he is the constitutional designee as chairman of the

Council on Scientific Assembly. This annual report is divided into three areas: Membership, fiscal reporting, and constitutional duties.

Membership. The total membership of your association for 1963 exceeded the four year average preceding that time and was the highest yet recorded.

(a) *Membership for 1963.* On December 31, 1963, there were on the rolls of your association 1,365 members in good standing as compared with 1,346 a year previously. This 1963 total is adjusted to reflect subtraction of those who died during the year or moved from the state. It includes:

1,209 paid members
90 Emeritus members
66 members exempt from dues other than Emeritus

Although the overall growth is about 1.5 per cent, there was a 3 per cent increase in paid members and decreases of 10 per cent among Emeritus and 10 per cent among those exempt for other reasons.

(b) *Membership for 1964.* On May 1, 1964, there were 1,282 members in good standing on the rolls as compared with 1,319 on the same date a year ago, indicating a small lag in current reporting. Among these are:

1,128 paid members
88 Emeritus members
66 members exempt from dues other than Emeritus

In the latter exempt group, 41 are exempt from dues by reason of training in AMA-approved residency programs, five are in military service, seven are Associate members, seven are Scientific members, five are exempt by reason of extended illness, and one, for reason of undue hardship.

(c) *Status of Current Reporting.* All totals reported have been adjusted to include only living members in Mississippi and those properly on the rolls who are outside the state. The association commends the following component medical societies for having secured 100 per cent of their renewable 1963 membership for the current year as of this reporting:

Amite-Wilkinson County Medical Society
Claiborne County Medical Society
Clarksdale and Six Counties Medical Society
Delta Medical Society
DeSoto County Medical Society
North Mississippi Medical Society
Pearl River County Medical Society

Fiscal Reporting. In accordance with accepted practice, your Secretary-Treasurer submits a statement of your association's financial condition as of April 30, 1964, as an attachment to this report. The annual report of audit has been rendered by the independent certified public accountant based upon detailed examination of all books and records for 1963. The Council on Budget and Finance has reviewed fiscal records and the report of audit and has reported to the Board of Trustees in this connection. Your Secretary-Treasurer offers the following comment:

MISSISSIPPI STATE MEDICAL ASSOCIATION

Statement of Financial Condition, April 30, 1964

ASSETS

Current Assets		
General Fund		
Cash on deposit	$70,320.65	
Due from Department of Defense, Medicare administrative costs	1,179.00	
Due from advertisers, JMSMA	4,524.39	
Other JMSMA receivables	321.46	
Prepaid expenses	1,282.46	
Other receivables	900.03	$ 78,527.99
Medicare		
Cash on deposit, Professional Account	37,476.34	
Due from Department of Defense, Professional Account	27,523.66	65,000.00
Fixed Assets		
Land	13,605.30	
Building and equipment, less depreciation	78,183.74	91,789.04
Total book assets		$235,317.03

LIABILITIES AND NET WORTH

Current Liabilities		
Amortization, building, current year		$ 3,000.48
Long Term Liabilities		
Building	$33,914,24	
Medicare capitalization	65,000.00	98,914.24
Deferred Income		
Advance payments, 96th Annual Session		6,820.30
Net Worth		
Unappropriated net worth		126,582.01
Total liabilities and net worth		$235,317.03

(a) *Income and Revenues.* Dues income has shown some slight increase, as reflected in that portion of the report covering membership. Advertising revenue of your JOURNAL has declined about 40 per cent since 1960 or more than $1,500 per month.

(b) *Stability and Solvency.* In all respects, your association is financially solvent and stable. Appropriate adjustments with respect to JOURNAL operations have been made, and management measures include institution of all possible economies. There is no deficit budgeting.

(c) *1964-65 Budget.* The Council on Budget and Finance has carefully considered ongoing programs of your association and various needs, recommending an overall budget of $727,895.00 for 1964-65, an increase of only $98 over the previous year or one one-hundredth of 1 per cent. With this minor exception, it is the lowest budget adopted since 1959. Under a revised reporting policy, a copy of the budget is appended to this report.

Constitutional Duties. Your Secretary-Treasurer is an *ex officio* member of all councils and committees of your association. As such, he attends meetings of these groups and reviews minutes and reports of all such bodies in the discharge of this responsibility.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

The work of our Secretary-Treasurer, Dr. C. G. Sutherland, is deeply appreciated by every member of the association. He has devoted himself without reservation to the many and varied tasks which his office demands of him. In his report, he has informed us of the membership, of the solvent fiscal status of our association, and of his constitutional duties. Your committee particularly appreciates the revision in the reporting procedure with respect to the fiscal affairs of the association and of the inclusion of the proposed budget in the report. We approve the report of the Secretary-Treasurer and commend his splendid performance of duties with respect to this important constitutional office.

The report of the reference committee was adopted.

REPORT OF THE COUNCIL ON BUDGET AND FINANCE

Report of the Secretary-Treasurer and Association Operations. We have considered the fiscal portion of the Report of the Secretary-Treasurer and we have examined the operation of the association with respect to all fiscal activities, including the report of the independent certified public accountant. The findings are to the satisfaction of your council. Prior to this annual session, we met for these purposes and have conferred with the Board of Trustees. We have determined that all accounts, receipts, and disbursements are regular and authorized.

Association Budget. We have considered the 1964-65 budget for operation of your association. We have conferred with the Board of Trustees who concur in our recommendations. Each item has been carefully evaluated as to necessity and adequacy. We recommend a total budget of $727,895.00 which includes the following sums for purposes stated: (1) For general operation of all activities and departments of the association, including production of your JOURNAL, $96,645.83; (2) for building amortization, utilities, maintenance, taxes, and associated expenditures, $11,446.85; (3) for professional fee aspects of the Medicare program, $600,000. These expenditures were outlined in the attachment to the Report of the Secretary-Treasurer. The 1964-65 proposed budget shows an increase of only $98 over the previous year, and, with this minor exception, is the lowest budget adopted since 1959. We recommend adoption of this amount as being a realistic minimum for continued effective operation of your association.

Insurance and Safeguards. We have examined a survey of insurance owned by the association on its physical properties and we find it adequate. Suitable safeguards for disbursement procedures, fidelity bonds, and proper safekeeping for records have been provided.

The report of the council was adopted.

REPORT OF THE EXECUTIVE SECRETARY

Mr. Rowland B. Kennedy: Duties and Responsibilities. Your Executive Secretary is responsible for maintaining the headquarters office and for conducting the administrative affairs of your association, in accordance with Article VII of the Constitution and Section 7, Chapter VII of the By-Laws. Generally, activities of your executive staff are divided into organizational, supportive, and administrative categories.

Staff Activities. In organizational and supportive activities, your staff works with the officers, Board of Trustees, the eight elected councils, and the 10 constitutional and eight *ad hoc* committees. Staff services include records-keeping, research, studies, and internal administrative tasks. General administrative duties relate to fiscal, membership, and publishing activities. During the present association year, your staff has been augmented by one additional member, the registered professional nurse serving in the Emergency Medical Care Unit at the Capitol Building, who serves in a temporary capacity. Two other personnel changes have occurred which result in no numerical increase in the staff.

Specific Reporting. Since your Executive Secretary reports directly to the officers, Board of Trustees, and various supervisory bodies in the performance of the staff's duties, this report is purposely general in scope and brief in character.

In behalf of your executive staff, deep appreciation is expressed for both the support given your headquarters office and the confidence reposed in us.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your reference committee considered the report of the Executive Secretary which outlines the function of our Central Office Headquarters staff. We reaffirm our confidence in the staff and express our appreciation to the Executive Secretary and his colleagues for their service to the association and we heartily concur in his commendation of his able associates.

The report of the reference committee was adopted.

REPORTS OF THE DELEGATES TO AMA

Dr. J. P. Culpepper, Jr.: 112th Annual Session. The 1963 annual session of the American Medical Association was conducted at Atlantic City June 16-20, 1963. As your accredited delegate, I submit this summary report. Principal issues before the House of Delegates were matters of internal organization, both as relate to governing mechanisms and the Scientific Assembly; compensation of house officers; the new Institute for Biomedical Research; matters of ethics with respect to dispensing of glasses and physician ownership of drug stores, repackaging houses, and pharmaceutical companies; tobacco and health; and a physicians' voluntary pension program. Official attendance was 36,811 among whom were 12,924 physicians. The 1963 Distinguished Service Award was presented to Dr. Lester R. Dragstedt of Gainesville, Florida. Dr. Edward R. Annis of Miami was inaugurated president, and Dr. Norman A. Welch of Boston was named president-elect by acclamation.

Internal Organization. After a year of debate, the House acted to enlarge the Board of Trustees to 15 from 11 members by adding three additional trustees for regular terms and the immediate past president for a one year term. Elected Board members now serve three instead of five year terms.

(a) *Scientific Assembly.* Reviewing the report of a special committee which studied section organization and the scientific program, the House disagreed as to the selection of section officers where the committee had proposed appointment instead of election. All such officers of each section—the chairman, vice chairman, delegate, alternate delegate, secretary, assistant secretary, and exhibits representative—will be elected by their respective sections.

(b) *Specialty Boards.* In another change, the House voted to require that nominations for membership on the several specialty (certifying) boards by the Council on Scientific Assembly be made only after advice and consent by the Board of Trustees.

(c) *New Section.* The former Section on Gastroenterology and Proctology was renamed the Section on Gastroenterology and a new Section on Proctology was created.

Compensation of House Officers. A joint report of the Councils on Medical Service and Medical Education and Hospitals recommended assignment of care of pay patients to house officers (interns and residents) and creation of a special fund in training hospitals into which such fees would be paid. It was proposed that the fund would be used only in the intern and resident training program with emphasis upon increased compensation for the house officers. The report was characterized as "a well-intentioned effort to find a solution to a most difficult, if not impossible, problem," but it was disapproved after expression of overwhelming opposition. The House recorded its opposition "to any system or program by which any part of an intern's or resident's salary is paid out of fees collected by the attending physician or out of fees collected under any type of medical-surgical insurance coverage."

Medical Ethics. Of three opinions of the Judicial Council considered by the House of Delegates, two were approved and one was disapproved.

(a) *Drug Interests.* It was held to be unethical for a physician to have a financial interest in a drug repackaging company. Similarly, it was held to be unethical "for a physician to own stock in a pharmaceutical company which he can control or does control while actively engaged in the practice of medicine." It is not, however, unethical for a physician to own or operate a pharmacy provided there is no exploitation of the patient.

(b) *Dispensing of Glasses.* The opinion of the Judicial Council, relating to the propriety of ophthalmologists' dispensing glasses, submitted in November of 1962 was returned to the council, and the following opinion was submitted at Atlantic City:

"The Judicial Council in interpreting this Principle (Section 7) of Medical Ethics, as it applies to the dispensing of glasses by ophthalmologists, is of the opinion that there are many facets to this practice. There are, therefore, many questions of fact to be resolved locally before a particular practice can be properly evaluated. The local medical society has a positive obligation to ascertain

whether the practice exploits the patient; whether the cost of the glasses is increased; whether the quality of the service is adequate; or whether the particular practice is a subterfuge to permit the doctor to profit by the sale of the glasses and for no other reason. If the doctor dispenses glasses solely for profit, his actions do not uphold the dignity and honor of the medical profession and its traditions and he is definitely unethical."

This opinion was not approved by the House of Delegates and the policy previously existing was reaffirmed, which, in substance, states that "the doctor is permitted to exercise his own best judgment when caring for his patients" and that dispensing is ethical when "in the best interest of his patient."

Other Actions. The House of Delegates acted on other matters as follows:

(a) *Research Institute.* A recommendation of the AMA Education and Research Foundation to establish an Institute of Biomedical Research was approved. The Institute will devote itself to study of life processes, particularly as relate to intracellular mechanisms, in a general field of pure, basic, nondisease-oriented research. It will not render medical service nor conduct a graduate training program leading to a degree. Investigators will "be composed of groups of dedicated, imaginative workers who are capable of significant scientific achievements through the interaction of their intellects and experience, with unmatched facilities and maximum freedom from external pressures."

(b) *Physicians' Pension Plan.* A program for physician participation in the Keogh plan was approved. For Mississippi physicians, shares are sold through a mutual fund dealer. This AMA program competes with our own physicians' retirement plan.

(c) *Tobacco and Health.* The House adopted a report of the Board of Trustees recommending that AMA should defer any definitive statement regarding any relationship between tobacco and disease, pending the release of the U. S. Public Health Service study.

(d) *Legislative Positions.* Federal funds for staffing community mental health centers were opposed as were provisions for student loans in the Health Professional Educational Assistance Act of 1963, federal aid to medical, dental, and osteopathic education.

Dr. George E. Twente: 17th Clinical Session. The 1963 clinical session of the American Medical Association was conducted at Portland, Oregon, December 1-4, 1963. As your accredited delegate, I submit this summary report. Major issues before the House of Delegates included voluntary health agencies, loss of narcotics stamps, tobacco and health, editorial revisions of the Constitution and By-Laws, blood bank policy, and membership eligibility regardless of race, religion, or place of national origin. Official attendance was 7,103 among whom were 3,144 physicians.

Voluntary Health Agencies. Two major—and opposing—presentations were before the House with reference to voluntary health agencies. The Indiana delegation introduced a resolution which proposed that AMA "review and study all facets of the operation of voluntary health agencies operating on a national level and act as an accrediting agency for these agencies. . . ." The Board of Trustees presented a report on the work of the Committee on Voluntary Health Agencies and its advisory role to these groups. The House disapproved the Indiana resolution, reaffirming the historic policy that "AMA does not approve products, services, or organizations." The Board report was approved, and the House stated that "AMA (should) maintain its policy of neither approving nor disapproving national voluntary health agencies" but continue to offer guidance on medical aspects of such programs. Additionally, the document, "Principles for Medical Guidance to National Voluntary Health Agencies," was adopted. This provides for:

(a) Definition of voluntary health agencies.

(b) Responsibility of medical organization to such groups.

(c) Mutual responsibilities between these agencies and medicine.

In approving this guide, the House directed that:

(a) There should be a mutual exchange of information and opinion enabling the medical profession and the agency to understand each other's policy and practice, and

(b) A national voluntary health agency should seek the advice of the medical profession when embarking on a national medical program.

Loss of Narcotics Stamps. Your delegates introduced Resolution 41 at the Atlantic City annual session, subject: "Information on Loss of Narcotics Stamps." This action was undertaken as a result of adoption of Resolution 2 at our 95th Annual Session in 1963. Final action on this proposal was taken at Portland with adoption of Supplementary Report H of the AMA Board of Trustees which recommended that the several state medical (licensure) examining boards as-

sume responsibility for acting as an information source on loss or acquisition of federal narcotics stamps by doctors of medicine. Additionally, the matter has been presented to the national organization of licensing boards by the AMA.

Tobacco and Health. A proposal that the AMA Education and Research Foundation undertake a comprehensive program of research on tobacco and health was approved. It was agreed that many gaps exist in knowledge about the relationship between smoking and health, and the House directed that the study should "be devoted primarily to determining which significant human ailments may be caused or aggravated by smoking, how they may be caused, the particular element or elements in smoke that may be the causal or aggravating agent, and methods for the elimination of such agent." The Board of Trustees voted $500,000 to help finance the research.

Membership Eligibility. The Rhode Island delegation presented a resolution which proposed adoption of the following policy statement:

"That the Board of Trustees of the American Medical Association be, and hereby is, instructed to take such action as it deems necessary or appropriate to deny the rights and privileges of membership in the American Medical Association to members of any constituent (state) association or component (local) society thereof which denies membership to any qualified physician because of race, religion, or place of national origin."

A special report of the Board of Trustees asked that "members of the medical staff of every hospital where the admission of a physician to hospital staff privileges is subject to restrictive policies and practices based on race be urged to study this question in the light of prevailing conditions with a view to taking such steps as they may elect to the end that all men and women professionally and ethically qualified shall be eligible for admission to hospital staff privileges on an equal basis, regardless of race." The House rejected the Rhode Island resolution and adopted the Board report, reaffirming a 1950 policy which states that "constituent and component societies having restrictive membership provisions based on race study this question in the light of prevailing conditions with a view to taking such steps as they may elect to eliminate such restrictive provisions."

Other Actions. The House of Delegates acted on other matters as follows:

(a) *Constitution and By-Laws.* Editorial changes, largely designed to shorten and simplify, were made in the Constitution and By-Laws. Those changes applying to membership have been published for the information of all members in JOURNAL MSMA and a special mailing has been made in this same connection to local society secretaries.

(b) *Blood Banks.* A policy statement declaring that "it is highly essential that the organization of new blood banking programs and the modification of existing ones should have, in the interest of public health and safety, the approval of the county or district medical society and, therefore, should be coordinated with existing approved blood banking facilities." The House further stated that since a blood bank can be considered a medical facility, the highest authority in the organization should be a physician.

(c) *Social Security.* The House, by substantial majority, reaffirmed its long-standing policy of opposing compulsory inclusion of physicians under Social Security.

Dr. J. P. Culpepper, Jr. During the 1963 association year, Dr. J. P. Culpepper, Jr., concluded his service as Vice President of the American Medical Association and as a member of the Board of Trustees by reason of expiration of terms of office. At national level, Dr. Culpepper was energetic and diligent, giving generously of his time during extensive travel throughout the continental states and Alaska. As his terms neared their expiration, he unfortunately sustained severe personal injuries, requiring long term hospitalization. With reluctance, he followed medical advice that he not undertake the trip to Portland. Since his Alternate Delegate was unable to attend, our President, Dr. John G. Archer, was seated as substitute delegate with the advice and consent of our own Board of Trustees.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

The representation of our state medical association at the AMA has been outstanding through the efforts of Dr. Culpepper and Dr. Twente. In approving the reports of these delegates, your reference committee also commends Dr. Culpepper for his service to American medicine in the capacity of Vice President of the American Medical Association and as a member of its Board of Trustees. We thank Dr. Archer for serving as substitute delegate at the Portland Clinical Session in 1963 when Dr. Culpepper was unable to attend. We express deep appreciation to Dr. Twente for his able services as our delegate.

The report of the reference committee was adopted.

ANNOUNCEMENT OF NOMINATING COMMITTEE

Following a recess for caucuses by association districts, the Nominating Committee was announced:

T. K. Chandler, Tunica, District 1
Joseph B. Rogers, Oxford, District 2
M. Q. Ewing, Amory, District 3
S. Lamar Bailey, Kosciusko, District 4
J. A. K. Birchett, Vicksburg, District 5
Pete H. Rhymes, Philadelphia, District 6
Eugene A. Bush, Laurel, District 7
G. Swink Hicks, Natchez, District 8
B. B. O'Mara, Biloxi, District 9

Dr. O'Mara was elected chairman by the committee which conducted open sessions on May 13, 1964.

REPORT OF THE COUNCIL ON SCIENTIFIC ASSEMBLY

Dr. C. G. Sutherland: Organization and Duties. Your Council on Scientific Assembly is selected pursuant to Section 3, Chapter IX, By-Laws of the association, and is charged with planning the annual session to include all phases of scientific activities. The council membership consists of the chairmen of the seven formal scientific sections and your Secretary-Treasurer. The President and President-elect are *ex officio* members.

96th Annual Session. In many respects, your 96th Annual Session presents one of the most ambitious programs yet undertaken by your association. Your chairman commends the seven scientific sections for their excellent choice of essay topics and essayists. Especial mention is made of the single topic programs which will be presented by the Sections on Surgery (Seminar on Malignancy of the Breast) and General Practice (Symposium on Narcotic Addiction). The scientific exhibit is varied and stimulating. We are glad to have excellent representation of respected firms in the technical exhibit, and all members are encouraged to visit each booth. We welcome the many specialty societies and fraternal groups who have scheduled concurrent meetings.

Congress on Health Quackery. The successes enjoyed in presenting special program features in 1962 and 1963 encouraged your council to seek another special program of national importance for this 96th Annual Session. Since health quackery is a major threat to the health of all citizens, the decision was made to present a congress on this subject. We have been fortunate in securing the services of outstanding authorities of national repute who will address the congress.

Scientific Achievement Award. The second annual Mississippi State Medical Association Scientific Achievement Award will be presented during the annual association banquet to that member or members of your association whose scientific exhibit is adjudged best.

Expression of the Council. Your Council on Scientific Assembly is deeply grateful to the many among our members who devote themselves to the enormous and complex tasks of planning, organizing, and presenting your annual session. We hope that the present meeting is professionally profitable and personally enjoyable for all in attendance.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Your reference committee commends the Council on Scientific Assembly for the interesting and stimulating program which has been presented at the 96th Annual Session. We feel, however, that our association can profit by combining our scientific work and presenting essays before general sessions, rather than by having a number of scientific programs proceeding simultaneously. In this connection, we recommend that we retain our seven formal scientific sections, their separate identities, and their prerogatives of selecting their own officers and essayists. We believe that we should continue to permit a maximum of two out-of-state speakers per section, thereby achieving these goals which we recommend without the necessity of changing our By-Laws. We ask that the Council on Scientific Assembly, consisting of the seven section chairmen and our Secretary-Treasurer, work together to present such a scientific program at the 97th Annual Session in 1965.

The report of the reference committee was amended on motion by Dr. R. J. Moorhead to add the phrase, "rather than by having a number of scientific programs proceeding simultaneously," at the end of the second sentence. The amendment was discussed by Drs. J. Manning Hudson of Jackson, Guy T. Vise of Meridian, E. LeRoy Wilkins of Clarksdale, and Mr. Kennedy, the Executive Secretary, who supplied information at the request of the Speaker. Dr. Lamar Arrington, chairman of the reference committee, moved adoption of the report as amended, second by Dr. George E. Twente of Jackson, and the motion was adopted.

Dr. Guy T. Vise: Council Organization and Duties. The Council on Medical Service is responsible for the study of all aspects of medical care and the circumstances under which it is provided. It is a constitutional body of the House of Delegates, elected under the provisions of Section 2, Chapter IX, By-Laws of the association. The council is assisted in its work by seven constitutional committees and two *ad hoc* committees, a working force of 66 physicians in elected, appointed, and consultant capacities. During 1963-64, these groups met on more than 12 occasions, conducted various conferences, and represented our association at five national meetings. The committees are:

(a) *Constitutional Committees.* Cancer Control, Occupational Health, Federal Medical Services, Maternal and Child Care, Mental Health, Diseases of the Heart, and Aging.

(b) *Ad Hoc Committees.* Blood and Blood Banking and Disaster Medical Service.

Activities of the Council. Apart from work and projects of its several committees, your council was concerned with a number of separate tasks. These are included in this section of the report or as otherwise indicated.

(a) *Teaching Programs in Charity Hospitals.* These studies and specific recommendations are contained in a supplemental report.

(b) *Veterans Administration Medical Program.* This special study, requested at the 95th Annual Session, is the subject of a supplemental report.

(c) *Voluntary Health Agencies.* A survey, study, and policy review of approved voluntary health agencies, requested at the 95th Annual Session, are included in a supplemental report.

(d) *Referral from the Board of Trustees.* Your Council was asked to study and report to the Board with reference to the medical service situation at the Parchman state penitentiary, and this report was made and considered at the Board's April 9, 1964, meeting.

(e) *Pending Applications for Approval of Voluntary Health Agencies.* Two applications for association approval were considered by your council with reference to voluntary health agencies and one application from a nonmedical agency.

(1) *Cerebral Palsy.* Applications for association approval from the Cerebral Palsy Association of Mississippi and the United Cerebral Palsy of Mississippi, Inc., were referred to your council at the 95th Annual Session. Both applications were in order, fulfilling association criteria for approval of voluntary health agencies. Your council recommends that the House of Delegates approve both.

(a) *LAOS.* An application from Layman's Overseas Service, a project sponsored by the Mississippi Conference of the Methodist Church, for association approval was referred to your council. LAOS seeks the volunteer, uncompensated services of individuals in many areas of endeavor, including medicine, for brief tours in foreign nations. A total of 52 categories of skills are sought. While the project is meritorious and worthy, it is essentially nonmedical and, therefore, not a matter for association approval. Your council recommends that no action be taken on the application and the organization so informed.

Committee Activities. Programs, studies, and activities of your council's several committees embrace a wide range of subject areas and policy development. Among these are:

(a) *Cancer Control.* This body is concerned with activities relating to research and care of cancer patients. In its annual report, it stated that "the comprehensive study, 'Smoking and Health,' by the Advisory Committee to the Surgeon General of the Public Health Service is the most probing study yet made in this connection." The committee has also monitored the separate, ongoing study of the American Medical Association with respect to smoking and health for which a grant of $500,000 was provided from AMA funds and $10 million was accepted (without restriction) from five major tobacco manufacturers.

(1) *American Cancer Society.* The committee reports close liaison with the American Cancer Society, expressing an interest in the latter's recently appointed Committee on Leukemia.

(2) *American College of Surgeons.* The committee reports that since 1961, the number of approved tumor clinics in Mississippi has increased to 10 from seven. The newer units are the Keesler Air Force Base Hospital at Biloxi, the Greenwood Leflore Tumor Clinic at Greenwood, and the South Mississippi Tumor Clinic at Gulfport. The chairman represented the association at the ACS Regional Cancer Workshop.

(b) *Occupational Health.* In addition to a major study project, this committee reports five ongoing programs including study of radiation hazards in industry, liaison with the Southern Association of Workmen's Compensation Administrators before which the chairman appeared as a speaker, continued liaison with the Mississippi Economic Council in workmen's compensation studies and employee relations, professional edu-

cation through a series of articles and editorials in our JOURNAL MSMA, and immunizations in industry.

(1) *Immunizations.* The committee concurs with the AMA-approved guide on industrial immunization programs and recommends that "an employer should immunize his employees who by reason of their occupation or job assignment may be exposed to significant hazards against which immunization procedures are available," such immunization to be accomplished under the supervision of physicians.

(2) *Small Plant Programs.* Preliminary planning for the study of occupational health programs in small plants in Mississippi has been completed with the formal adoption of the study prospectus. The committee will work with the Mississippi Industrial and Technological Research Commission and Mississippi State University in this connection, although the study will be conducted by the committee and under its supervision. A full report of the two year project is expected in 1965.

(c) *Maternal and Child Care.* Since inception of the continuing maternal mortality study in 1958, the committee has made 369 inquiries on maternal deaths, receiving 317 replies, a response of 85.9 per cent. All returns have been studied by the committee during regular quarterly meetings. The five year summary, covering activities during 1957-61, has recently been published. It is especially noteworthy, your council believes, that a concomitant decline in maternal mortality from 75 in 1957 to 48 in 1961 was enjoyed. The contributions of the committee in this respect have been enormous.

(d) *Mental Health.* The committee is actively participating in the Mississippi Mental Health Planning Council which will develop during its two years of projected existence a comprehensive program for Mississippi. Funds in the amount of $62,200 have been provided for the council. In addition to six task groups studying mental illness in adults, emotionally disturbed children, alcoholism, crime and delinquency, mental retardation, and multi-problem families, the Mississippi Psychiatric Association has initiated studies on private psychiatric services. The committee has represented the association at two national meetings, and the chairman delivered a major address before the First Statewide Conference on Mental Illness in Mississippi.

(e) *Aging.* A new focus of interest has been placed on nursing homes, and the committee represents the association in the recently organized Statewide Liaison Committee on Nursing Homes, a body representing five organizations in the health service field. The program of the National Council for Accreditation of Nursing Homes, jointly sponsored by AMA and the American Nursing Home Association, is being monitored and supported. This committee continues to serve other bodies of our association in both an advisory and informational capacity.

(f) *Diseases of the Heart.* This committee has not had opportunity to function, and since any undertaking it may now initiate would duplicate other work, your council recommends that Section 2, Chapter IX, By-Laws of the association be amended to delete provision for the committee, thereby discontinuing it.

(g) *Other Committee Activities.* The work of the Committee on Federal Medical Services in making the VA medical program study is included in a supplemental report. Among the *ad hoc* bodies, the Committee on Disaster Medical Service continues to support the Medical Self-Help Training Program and proposes to work with the new AMA Committee on Disaster Medical Care. The Committee on Blood and Blood Banking anticipates presentation of another workshop-institute on blood banking and transfusion service with the Mississippi Hospital Association. Your council chairman continues to serve as a member of the Liaison Committee with the Mississippi Hospital Association.

Officers of the Council. During the 1963-64 association year, Dr. Guy T. Vise of Meridian served as chairman of your Council on Medical Service. Dr. M. Q. Ewing of Amory served as vice chairman. One new member, Dr. George F. Archer of Greenville, was welcomed to the group in 1963.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

Your reference committee commends the Council on Medical Service for the enormous amount of work carried on by this elected body of this House of Delegates. We support the policy on immunization against tetanus and we feel that this should be a state-wide effort among all members of the public as well as those to whom the benefits of occupational medicine would accrue. We commend the study made by the council with respect to medical services at the state penitentiary at Parchman and we ask that these studies be continued toward the end that the present

problem is solved. After this, we concur with the council that further studies in penal medicine be pursued.

With the exception of that portion of the report relating to voluntary health agencies, your reference committee recommends approval of the report and commendation of the council.

The report of the reference committee was adopted.

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

That portion of the report of the Council on Medical Service relating to a proposed amendment to Section 2, Chapter IX, By-Laws MSMA, was considered by your council. The Council on Medical Service recommended discontinuation of its constitutional committee, the Committee on Diseases of the Heart.

After careful consideration and extended discussion, your Council feels that this committee should be continued as a constitutional committee of the Council on Medical Service and, therefore, recommends that section 3 (f) of the report be not adopted.

The report of the council, acting as a reference committee, was adopted.

SUPPLEMENTAL REPORT "A" OF THE COUNCIL ON MEDICAL SERVICE

Dr. Guy T. Vise: Background. At the 95th Annual Session in 1963, the House of Delegates acted on two reports relating to teaching programs in charity hospitals in Mississippi. These reports resulted from the original proposal in this connection by the Council on Medical Service in 1962. Both were adopted.

(a) *Report of the Board of Trustees in 1963.* The Board communicated the views of the University of Mississippi School of Medicine on the proposal to the House. While recognizing and appreciating the school's position and the complexities of teaching programs, it was stated: "Nevertheless, the Board feels that further exploration in this area is indicated and suggests that the Council on Medical Service make a survey as to the availability of willing and qualified physicians in the localities of these hospitals to supervise and instruct in such a program."

(b) *Report of the Council on Medical Service in 1963.* In a simultaneously submitted report, your council reported further studies, indicating that establishment of teaching programs in charity hospitals would more than double the number of available teaching beds, increase the availability of teaching patients in all age groups, and fulfill a need for expansion of residency programs in Mississippi. Your council pointed to the success of similar programs in Louisiana where two medical schools and one major nonuniversity teaching hospital participate. It was further stated that the council "recognizing the desirability of augmenting the clinical faculty to assure adequate supervision of residents, suggests that there are those physicians in cities having charity hospitals who are qualified to instruct, i.e., board certified or board eligible, and who would be willing to do so."

Studies and Survey. With the background of prior studies and policy development as a frame of reference, your council made studies as directed. A list of 63 physicians in 10 specialty disciplines was developed by double screening every member of the association in the Hattiesburg-Laurel, Natchez, Meridian, and Vicksburg areas. Extremely stringent criteria as to training were applied, largely accounting for the limited selections. By no means was this intended to suggest that there are not other qualified physicians in these areas. Rather, it was deemed appropriate to adhere to the absolute letter of the House of Delegates' pronouncements.

(a) *Response.* Of 63 physicians surveyed, 71 per cent or 45 physicians responded. By areas, the percentage of response was: Hattiesburg-Laurel, 72; Meridian, 80; Natchez, 70; and Vicksburg, 65. Of the 45 responding, 36 (80 per cent of the respondents) indicated a willingness to teach. Only nine physicians (20 per cent) declined to participate, usually for valid professional reasons. Of the 36 qualified respondents expressing a willingness to teach in their respective charity hospitals, eight were in Hattiesburg-Laurel, 12 were in Meridian, seven were in Natchez, and nine were in Vicksburg. Among these are nine general and thoracic surgeons, one internist, four obstetricians-gynecologists, one ophthalmologist, three orthopaedic surgeons, one otolaryngologist, four pathologists, seven pediatricians, one psychiatrist, and five radiologists.

(b) *Concurrent Study of Hospitals.* To assure availability of necessary information as to teaching opportunities in the charity hospitals, a concurrent study was made with the assistance of the Board of Trustees of State Eleemosynary Institutions as to current bed capacities and admissions and discharges of patients during 1963. There are 497 active beds in the four institutions, 100 of which are for care of the chronically ill. During the year, 12,440 patients were admitted, and 12,065 discharges were recorded. The aver-

age patient stay for acute medical and surgical classifications ranged from 6.3 days in Meridian and Vicksburg to 7.3 days in Natchez. The average stay for the chronically ill in Vicksburg was 52.0 days with 233 admissions and 228 discharges.

(c) *Legislative Aspects.* In 1963, the House of Delegates asked the Council on Legislation to examine the legislative aspects of this proposal. The council stated that "consultation with the charity hospital board disclosed that neither new nor amendatory legislation to Sections 6920-56, Mississippi Code of 1942, Recompiled, under which the charity hospitals are operated is necessary to implement the proposed teaching program."

Implementation Recommendations. Your council recommends implementation of the proposed teaching programs, restating the previously approved proposal that only residents in their third and succeeding years go into the charity hospitals. We feel that the program will benefit the state, increase teaching opportunities, and upgrade the quality of care in the charity hospitals. Moreover, the University will also be benefitted. We urge the support of University authorities and the residents themselves in this connection. Further, the council recommends that:

(a) Local consultants who participate be paid a stipend or honorarium for services to add incentive for their assistance.

(b) University department heads and participating faculty members be paid additional compensation for time spent in the program, preferably at a rate per day, plus travel expenses.

(c) The possibility of having residents' stipends paid by the Board of Trustees of Eleemosynary Institutions for periods served in the hospitals be explored.

(d) Local physicians who have indicated their willingness to teach be asked to work with the University in evaluating specific teaching opportunities and in completing mutually acceptable teaching agreements.

(e) Residents in their final year be afforded new and additional professional independence, thereby providing excellent preparation for private practice.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

This supplemental report of the council brings before the House of Delegates the study of teaching resources and recommendations for implementation of teaching programs in the four charity hospitals in Mississippi.

Your reference committee approves paragraphs one and two of the report and recommends the following substitute paragraph for the third section:

"*Implementation Recommendations.* Your council recommends implementation of the proposed teaching programs. We feel that the program will benefit the state, increase teaching opportunities, and upgrade the quality of care in charity hospitals. We urge the support of University authorities in this connection."

Your reference committee recommends that the remainder of the report be deleted.

Should implementation of this program be considered not feasible at this time by the University of Mississippi School of Medicine, then exploratory discussions should be undertaken with nearby teaching centers having an interest and experience in the proposed program with a view toward upgrading the quality of care in our charity hospitals.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "B" OF THE COUNCIL ON MEDICAL SERVICE

Dr. Guy T. Vise: Background. At the 95th Annual Session in 1963, your Council on Medical Service reported that approximately 12 years had elapsed since the association has reviewed the hospital and medical care program of the Veterans Administration. The House of Delegates asked that studies be conducted, and the Council assigned this task to the Committee on Federal Medical Services. This report is based upon these studies.

Legislative History. The first federal institution for veterans, the U. S. Naval Home at Philadelphia, was authorized by Congress in 1811. This facility was operated primarily as an old veterans home and it was more than 100 years later before Congress, in 1917, established the first purely medical program for veterans. The program was restricted to veterans with service-connected disabilities and administered by the U. S. Public Health Service.

From these modest beginnings, the federal government's medical care program for veterans has expanded to 170 hospitals, 18 domiciliary facilities, and 93 outpatient clinics—all under an independent agency of government named the Vet-

erans Administration whose annual expenditures for veterans hospital and medical services exceed one billion dollars.

The basic legislative authority for the VA's hospital and medical program, Section 6, Public Law No. 2, 73rd Congress, March 20, 1933, and subsequent amendments, authorizes the Administrator of Veterans Affairs to provide hospital, medical, and domiciliary care to all veterans with service-connected disabilities, and to veterans with nonservice-connected disabilities who are unable to pay for such care. In the latter regard, the veteran's statement under oath is sufficient proof that he is unable to pay for medical treatment. There have been several amendments to Public Law 73-2 since World War II which have liberalized the VA program:

(a) Public Law 81-791 authorizes VA outpatient medical treatment to all Spanish-American War veterans regardless of the nature or origin of their disability.

(b) Public Laws 80-748, 81-573, 82-174, and 82-239 establish a presumption of service connection for certain diseases that are 10 per cent or more disabling within one to three years following separation from active duty.

(c) Public Law 86-639 authorizes pre- and post-operative outpatient care for veterans with nonservice-connected disabilities.

Operating Procedures. When Congress first authorized nonservice-connected care for veterans in 1923, there were five million veterans and an excess of VA beds. Today, there are over 22 million veterans and, according to the VA, a shortage of beds. Furthermore, the veteran population is aging with a resultant increase in the need for facilities to care for long term disabilities.

During the Eisenhower administration, an administrative ceiling of 125,000 VA hospital beds was established. H.R. 8009, presently being considered by Congress, would authorize 4,000 additional beds to be used specifically for nursing type care. The VA's present operating bed capacity is 120,141 beds; in 1940, it was 58,834 beds. VA hospitals treated 712,900 patients during fiscal year 1963, an increase of over 75,000 since 1960. In addition to its in-hospital care program, the VA provides outpatient treatment by private physicians for veterans with service-connected disabilities under its Hometown Medical Care Program.

The VA is also involved in various research and training programs. Over 7,000 research projects are underway in VA hospitals and clinics; and 84 VA facilities have approved residency programs and medical school affiliation.

Because of this varied program, it has been difficult to make comparisons between costs of hospital care in VA institutions and non-federal hospitals. In 1958, the AMA Committee on Federal Medical Services reported a study based "on cost data covering only those VA services which may be considered common to all hospitals." The study concluded that "after 'extra' VA services were excluded, the average (VA) case costs three times as much as the average non-federal case."

The average costs were obtained by multiplying the daily average cost per patient by the length of stay in a hospital and the higher overall costs figures of the VA services were due to the difference in the average length of stay for general medical and surgical patients—30 days in a VA hospital compared to about seven days in a non-federal hospital.

The VA Hospital and Medical Program in Mississippi. The VA operates a psychiatric care facility at Gulfport, a combination domiciliary and general hospital facility at Biloxi which is an adjunct of the Gulfport facility; and a general hospital at Jackson. Gulfport has a present operating capacity of 904 beds; Biloxi has an operating capacity of 209 general hospital beds and 818 domiciliary beds; and Jackson has an operating capacity of 498 beds. The Gulfport and Jackson facilities are affiliated with the University of Mississippi School of Medicine and participate in the University's training programs. In this regard, residents in certain specialties spend approximately three months a year at the VA facilities and are paid by the VA during this period. Additionally, medical students spend approximately two months a year at the VA facilities while in their junior and senior classes.

At Gulfport, seven of the 14 full time staff physicians have university appointments; at Jackson, 19 of the 21 full time staff physicians have such appointments. Both facilities conducted various research programs in 1962 with a total of $201,737 allocated for this purpose.

In a 1963 survey which required all VA hospitals to report the percentage of in-hospital patients being treated for service-connected conditions as of November 30, 1962, the Gulfport facility reported 47 per cent of its patients admitted for such conditions; the Jackson facility reported 15.7 per cent. Both facilities reported that approximately 30 per cent of their nonservice-connected cases were referred by private physicians.

In the same survey, general hospitals were asked to give the average stay of medical and surgical patients discharged during the six months

ending October 31, 1961, and October 31, 1962. The Jackson facility reported 26 days for the former period and 32 days for the latter.

MSMA and AMA Policies. The question of whether this nation owes hospital and medical care to veterans with service-connected disabilities has never been at serious issue. Both the AMA and MSMA have stated in this regard that "Veterans requiring care for service-connected disabilities are entitled to full care for those disabilities."

At issue have been the questions of how best to provide care to veterans with service-connected disabilities, and whether veterans should receive "veterans medical care" for disabilities having no connection with their service in uniform.

The AMA has stated that "the veteran with a service-connected disability should be given the right to choose where and by whom he should be treated rather than this decision being made by the government." Additionally, both the AMA and MSMA have stated that "veterans requiring care for nonservice-connected disabilities should provide it themselves, or if medically indigent, should be state or local responsibilities."

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

This supplemental report of the Council consists of a study with respect to the hospital and medical care program of the Veterans Administration and of a detailed review of such activities in Mississippi. We approve the report and recommend reaffirmation of the association's policy of providing care for Veterans with service-connected disabilities and stating that "Veterans requiring care for nonservice-connected disabilities should provide it themselves or, if medically indigent, should be state or local responsibilities."

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "C" OF THE COUNCIL ON MEDICAL SERVICE

Dr. Guy T. Vise: Background. At the 95th Annual Session in 1963, the House of Delegates directed that the Council on Medical Service "review annually the programs of voluntary health agencies approved by this association and report its findings to the House of Delegates." In addition to conducting this review, your council has also studied existing MSMA and AMA policies as apply to voluntary health agencies.

Characteristics and Definitions of VHA's. The Mississippi State Medical Association has never formally defined the designation "voluntary health agency." Generally, their characteristics are these:

(a) A voluntary health agency is a voluntary nongovernmental association of citizens, with

(b) A common goal or interest, usually the prevention and control of some disease or infirmity, which

(c) Gathers voluntary contributions, gifts, memorials, and memberships, and

(b) Expends its resources in ways decided by its own governing body, most often for public and professional education, medical and basic science research, and medical care, and which

(e) May begin new fields of work or develop new administrative procedures to meet recognized needs.

More recently, AMA has defined a voluntary health agency as "any nonprofit association organized on a national, state, or local level, composed of lay and professional persons, dedicated to the prevention, alleviation, and cure of a particular disease, disability, or group of diseases and disabilities. It is supported by voluntary contributions primarily from the general public and expends its resources for education, research, and service programs relevant to the diseases and disabilities concerned."

MSMA Approval Mechanism. Prior to the creation of your present council (initially as a committee) in 1954, approval of voluntary health agencies was accomplished through various means in the absence of a single formal procedure. The currently employed approval process consists of requiring the group seeking MSMA approval to submit certain documentation to the Council on Medical Service. Documentation ordinarily required by the council consists of (1) a statement of purpose, function, and goals of the applying agency, (2) a copy of its constitution and by-laws, (3) a financial statement as well as a policy declaration of methods of fund raising, expenditures, and public accounting, and (4) a listing of officers and directors (trustees). During the past 28 years, the association has conferred its approval on nine such organizations:

(a) Mississippi Tuberculosis Association, date not recorded.

(b) The National Foundation, formerly the National Foundation for Infantile Paralysis, date not recorded.

(c) American Cancer Society, 1940.

(d) American Diabetes Association, 1951.

(e) American Heart Association, 1951.

(f) Muscular Dystrophy Association, 1955.

(g) Mississippi Society for Crippled Children and Adults, 1955.

(h) Mississippi Association for Mental Health, 1959.

(i) Arthritis and Rheumatism Foundation, 1961.

AMA Policy. Historically, the American Medical Association has not involved itself in the sanction of voluntary health agencies. In 1962, this policy was tested with the introduction of two resolutions for approval of two such agencies. The House of Delegates declined, stating that were it to grant approval, it would be evaluating not only medical programs but fund raising, administration, and personnel policies as well. Rather, it stated that it (AMA) has gained stature by confining its activities to offering guidance and medical advice to voluntary health agencies.

Recommendation of Council. Your Council on Medical Service recommends that it be authorized and directed to continue annual reviews of approved voluntary health agencies and that the association, through the council, continue to offer guidance and assistance to them from the medical viewpoint.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

This supplemental report was presented by the Council in response to instructions of this House of Delegates given at the 95th Annual Session in 1963 requiring that the council review programs of voluntary health agencies approved by the association, reporting such findings to the House of Delegates.

After careful consideration and extended discussion, your reference committee feels that evaluation of voluntary health associations with a view toward approval entails not only the sanction of medical programs but also those of fund raising, administration, and personnel policies as well. We, therefore, recommend the following policy statement to be adopted by your House of Delegates:

"The Mississippi State Medical Association neither approves nor disapproves of any legitimate, established voluntary health agency. It is a policy of this association to offer guidance to such organizations and medical advice in connection with their several and respective activities."

Accordingly, your reference committee recommends that no action be taken on the recommendations of the council with respect to organizations interested in the field of cerebral palsy. Your reference committee concurs with the recommendations of the council with respect to the organization designated as Layman's Overseas Service.

The report of the reference committee was adopted.

REPORT OF THE COMMITTEE ON AMERICAN MEDICAL ASSOCIATION EDUCATION AND RESEARCH FOUNDATION

Dr. Raymond F. Grenfell: Organization and Duties. Your Committee on AMA-ERF is composed of one member from each component medical society appointed annually by the president of our association. The committee works in conjunction with the national body and solicits voluntary contributions from Mississippi physicians for medical education and research. All contributions are tax deductible and every dollar received is put to work in a medical school of the donor's choice.

1963 Contributions. Your committee is happy to report that Mississippi physicians contributed $7,258.20 to AMA-ERF during 1963. Nationally, contributions in 1963 were $1,208,463. Our University of Mississippi School of Medicine's AMA-ERF allocation for 1963 was $11,686.61. Over one-half of this amount represented contributions from Mississippi physicians, the rest was the University's share of undesignated contributions.

Medical Education Loan Guarantee Program. Your committee reported last year on the new AMA-ERF loan program for medical students, interns, and residents. By the end of 1963, a total of 11,875 bank loans with a principal value of nearly $14 million had been guaranteed under the program. In Mississippi, 326 loans with a principal value of $384,900 have been granted.

1964 Program. Your committee earnestly solicits a contribution to AMA-ERF from every Mississippi physician in 1964. We note the policy of a number of our component medical societies to devote a portion of one meeting each year to an appeal for AMA-ERF contributions. We hope all component societies will do this in 1964.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Your reference committee considered the report of the Committee on AMA-ERF and we are glad to note the continued increase in contributions to medical education from Mississippi physicians on a voluntary basis. We approve this report and recommend its adoption.

The report of the reference committee was adopted.

RESOLUTION NO. 1, IN MEMORIAM

Dr. C. G. Sutherland: WHEREAS, There are absent from among our numbers 29 members who have been called by Divine Providence since the 95th Annual Session; and

WHEREAS, Although we are grieved upon the passing of these beloved colleagues and friends, we are inspired by their lives of service and professional attainment; and

WHEREAS, This expression of our grief, deep affection, and respect should be recorded permanently among official records of the Mississippi State Medical Association, now, therefore, be it

Resolved, That this House of Delegates does mourn the passing of the following esteemed colleagues:

Joseph F. Armstrong, Jackson, September 4, 1963
William H. Banks, Philadelphia, February 7, 1964
Otis H. Beck, Greenville, November 17, 1963
Charles T. Berry, Greenville, July 14, 1963
Lucius W. Brock, McComb, April 17, 1964
Nash W. Broyles, Jackson, May 17, 1963
John T. Bryan, Meridian, June 20, 1963
Thomas Burk, Zachary, Louisiana, March 10, 1964
Eugene S. Busby, Hattiesburg, February 3, 1964
Roy D. Byars, Cascilla, September 3, 1963
Walter M. Coursey, Raleigh, June 8, 1963
B. L. Crawford, Tylertown, May 4, 1964
Isaac Edwards, Canton, December 1, 1963
Oscar G. Eubanks, Crystal Springs, June 25, 1963
Marvin J. Few, Rolling Fork, April 20, 1964
Frederick D. Hollowell, Jr., Jackson, May 28, 1963
Walter E. Johnston, Vicksburg, January 12, 1964
Louis M. Jurney, Oxford, October 29, 1963
Carl E. Lewis, Jackson, December 1, 1963
C. L. Manning, Jr., Clarksdale, October 25, 1963
Frank L. Ramsay, Laurel, February 17, 1964
Pink C. Risher, Laurel, July 6, 1963
Robert E. Shands, New Albany, October 6, 1963
Cyrus M. Shipp, Bay St. Louis, January 20, 1964
Karl O. Stingily, Meridian, January 6, 1964
S. Leroy Taylor, Eupora, January 10, 1964.
Jewel D. Turner, Tupelo, November 13, 1963
Henry G. Waldrop, Booneville, December 10, 1963
Thomas F. Wolford, Columbus, March 8, 1964
Andrew M. Wynne, Merigold, September 8, 1963

ACTION OF THE HOUSE OF DELEGATES

Without objection, Resolution No. 1 was acted upon without referral and was unanimously adopted by the House of Delegates standing in silent tribute.

RESOLUTION NO. 2, TOBACCO AND HEALTH

Dr. R. P. Henderson: WHEREAS, The preponderance of evidence indicates that the smoking of cigarettes is strongly implicated in the genesis of lung cancer, emphysema, and chronic bronchitis and is harmful to human health, and

WHEREAS, The Mississippi State Medical Association is concerned in all matters relating to the public health, now, therefore, be it

Resolved, That the Mississippi State Medical Association go on record as advocating the voluntary giving up of smoking by those already habituated, and be it further

Resolved, That the Mississippi State Medical Association urge its own members, all parents, teachers, voluntary health agencies, and other interested persons to do everything possible to influence young people not to start the habit of smoking.

RESOLUTION NO. 5, TOBACCO AND HEALTH

Dr. C. G. Sutherland: WHEREAS, There is ample proof concerning potential hazards to the health of those who smoke, and

WHEREAS, Many organizations have concerned themselves with educating the public to these hazards, and

Whereas, Many other state medical associations have publicly expressed their convictions of the potential hazards of smoking, now, therefore, be it

Resolved, That the Mississippi State Medical Association does publicly state that it believes smoking is potentially hazardous to health, and be it further

Resolved, That the Mississippi State Medical Association does commend and applaud those organizations engaged in the education of the public concerning such hazards.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Your reference committee had the benefit of extensive discussion on Resolutions Nos. 2 and 5, subject: "Tobacco and Health." Your committee observes that the American Medical Association has adopted no such position as is sought in these two resolutions, rather pointing out that new and additional research in this area is indicated. Moreover, the AMA has contributed funds for this pur-

pose. We further believe that our Mississippi State Medical Association should at all times be prudent in its pronouncements and we suggest that generalized statements of the nature contained in these resolutions are inappropriate. Your reference committee heard no presentations of support for these resolutions, the vast majority of those appearing before your committee having statements in opposition to them.

Accordingly, your reference committee recommends that Resolution Nos. 2 and 5 be not adopted.

Dr. Arrington, chairman of the reference committee, moved adoption of the report. Dr. George E. Twente of Jackson, made a substitute motion that Resolution No. 5 be adopted, seconds by Drs. R. J. Moorhead of Yazoo City and Guy T. Vise of Meridian. In discussion, Drs. Sutherland, Jim G. Hendrick of Jackson, J. Manning Hudson of Jackson, Mal S. Riddell of Winona, and C. R. Jenkins of Laurel supported the substitute motion. Drs. S. S. Kety of Picayune and A. M. McBryde of Sumrall supported the report of the reference committee.

The Speaker put the substitute motion which was adopted, thereby adopting Resolution No. 5 and taking no action on Resolution No. 2.

RESOLUTION NO. 3, EMERGENCY MEDICAL CARE UNIT

Dr. William E. Lotterhos: WHEREAS, The Mississippi State Medical Association, through its Council on Legislation, has been privileged to operate an Emergency Medical Care Unit in the New Capitol during the 1964 Regular Session of the Mississippi Legislature, and

WHEREAS, The Legislature saw fit to adopt House Concurrent Resolution No. 8 commending the association for this public service, and

WHEREAS, More than 60 members of the association have voluntarily served as "Doctor of the Day," making the project possible, now, therefore, be it

Resolved, That this House of Delegates does express its appreciation to these physicians who have contributed freely of their time and professional services as "Doctors of the Day" and to our registered professional nurse, Mrs. Ila G. McCleave, for her effective service at the unit.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

This resolution, introduced by Dr. W. E. Lotterhos of Jackson, in behalf of the Council on Legislation, expresses appreciation to more than 60 physicians who have contributed of their time and professional services as "Doctors of the Day" to our Emergency Medical Care Unit at the State Capitol. The resolution also expresses appreciation to our graduate, registered professional nurse, Mrs. Ila G. McCleave, for her service in this same facility. Your reference committee associates itself with the remarks of the Board of Trustees and the intent of the resolution in the belief that this project has been important in the field of public service and we recommend its adoption.

In discussion, Dr. A. Street of Vicksburg asked that the vote for adoption of the report of the reference committee be unanimous. The Speaker put the question, and the report was unanimously adopted.

RESOLUTION NO. 4, COMPULSORY HEALTH CARE UNDER SOCIAL SECURITY

Dr. William E. Lotterhos: WHEREAS, The Mississippi State Medical Association has, on numerous occasions, stated officially its unequivocal opposition to systems of socialized medicine and especially to compulsory federal health care of the aged under Social Security as proposed in H.R. 3920 and S. 880, the King-Anderson bills, and

WHEREAS, The association believes that a vast majority of all citizens may secure all necessary medical care through private means and that locally controlled programs of medical care for the indigent are sufficient and desirable, now, therefore, be it

Resolved, That this House of Delegates does reaffirm its opposition to H.R. 3920 and S. 880 and all related or similar measures.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

This resolution seeks reaffirmation of our policy of opposing compulsory federal medical care for the aged under Social Security. Your reference committee concurs in the objectives of this resolution and recommends that the House of Delegates reaffirm its prior position and adopt the resolution.

The report of the reference committee was adopted.

RESOLUTION NO. 6, OPPOSITION TO THE NATIONALIZATION OF MEDICINE

Dr. R. J. Moorhead: WHEREAS, The House of Delegates of the American Medical Association in June of 1963 called for a re-evaluation of its previous endorsement of "bricks-and-mortar" federal aid, and

WHEREAS, Evaluation of the Public Health Service Act (1944) and subsequent additions and amendments thereto—beginning with Hill-Burton Act of 1946 and continuing through the present Harris proposals (H.R. 10041 and H.R. 10042) —lends credence to the opinion that all these acts are part of a steadily evolving plan to accomplish the nationalization of medicine attempted earlier by the discredited Wagner-Murray-Dingell bills, and

WHEREAS, The ruling of the United States Fourth Circuit Court held that acceptance of Hill-Burton funds by private hospitals puts such hospitals into a federal-state public health program and makes them part of "state action," now, therefore, be it

Resolved, That the Mississippi State Medical Association hereby expresses its opposition to "bricks-and-mortar" federal aid, and be it further

Resolved, That the Mississippi State Medical Association urgently calls upon the House of Delegates of the American Medical Association to thoroughly re-evaluate its conflicting stands regarding federal aid and to come out with a statement based on principle in strict opposition to all proposals which may lead to the nationalization of medicine, regardless of the route such proposals may take.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

This resolution was introduced by Dr. R. J. Moorhead, Delegate from Yazoo County, and seeks an expression of opposition to the concept of "bricks-and-mortar" federal aid. At its 1959 annual session, this House of Delegates voted its opposition to such a concept and in 1963 when hearings were conducted on H.R. 12, Federal Aid to Education, your association was one of three groups presenting testimony against this measure, as was pointed out by the Board of Trustees in its report. While your committee agrees in principle with the intent of this resolution, we recommend that we reaffirm our 1959 policy, instruct our AMA delegates to continue to support this policy, and take no action on the resolution.

The report of the reference committee was adopted.

RESOLUTION NO. 7, AREA-WIDE PLANNING FOR HOSPITALS

Dr. R. J. Moorhead: WHEREAS, The United States Public Health Service in collaboration with the American Hospital Association has conducted a survey and issued a joint report on "Area-Wide Planning for Hospitals," and

WHEREAS, This report, as well as burgeoning literature on the subject, presents the thesis that only the big voluntary non-profit or government hospital can render complete or the best medical services, and

WHEREAS, These reports referred to further advanced the seductive argument that the building of private-for-profit hospitals may deprive a community of an "opportunity" to obtain government funds for a non-profit institution, and

WHEREAS, The President of Blue Cross, Mr. Walter J. McNerney, has been quoted as saying "any group which builds without reference to community planning jeopardizes the solvency of Blue Cross," and

WHEREAS, In one area their Blue Cross tried to deny claims from a hospital which had expanded its plant without consulting its area planning board, and

WHEREAS, Federal money is now being used for state-wide surveys for area-wide planning for health facilities in Minnesota, Kansas, and Hawaii, and

WHEREAS, Efforts are being made in various states to establish compulsory area wide health facilities planning of a statutory basis, and

WHEREAS, S. 855 by Senator Hubert Humphrey, which passed the Senate January 26, 1964, without debate, affords federal recognition and commendation for all such planning boards and commissions and lays the groundwork for ultimate complete control by such boards, now, therefore, be it

Resolved, That the House of Delegates of the Mississippi State Medical Association, in regular session assembled in Jackson, Mississippi, on May 14, 1964, opposes compulsory area-wide planning for health facilities and that this position of the Mississippi State Medical Association be called to the attention of the American Medical Association, and be it further

Resolved, That the Board of Trustees of this association be instructed to alert the governing boards of the several hospitals of this state to the dangers inherent in such compulsory planning.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

This resolution was introduced by Dr. R. J. Moorhead, delegate from Yazoo County. The purpose of the resolution is to oppose compulsory area-wide planning for hospitals as promulgated by agencies of the federal government.

Your reference committee, recognizing that the association has already adopted a policy of opposition to this activity, recommends adoption of the following substitute resolving clause:

"Resolved, That the House of Delegates of the Mississippi State Medical Association opposes compulsory area-wide planning for health facilities."

Moreover, your reference committee recommends that this policy position be communicated to the Mississippi Hospital Association by the members of the MSMA-MHA Liaison Committee.

The report of the reference committee was adopted.

RESOLUTION NO. 8, MSMA SPONSORSHIP OF ANNUAL ESSAY CONTEST FOR HIGH SCHOOL STUDENTS

Dr. R. J. Moorhead: WHEREAS, An essay contest for high school students, conducted through 18 consecutive years, has demonstrated its value as an educational program for informing high school students on the advantages of the practice of private medicine and the American free enterprise system, and

WHEREAS, The task of informing students must be sustained from year to year because each year a new group of students is brought into the high school, and

WHEREAS, This national essay contest has had much greater participation in those states in which the state medical association has participated to the extent of sponsoring state prizes, and

WHEREAS, The Mississippi State Medical Association, for several years prior to 1963, participated in this essay contest by sponsoring three state prizes ($100 for first prize, $50 for second prize, and $25 for third prize), and

WHEREAS, In the 18 years that the Association of American Physicians and Surgeons, Inc., an organization dedicated to the preservation of the American system of free enterprise medicine, has conducted this essay contest, three Mississippi students have won the national prize of $1,000 attesting to the knowledge gained by Mississippi participants in this contest, and

WHEREAS, The students winning these national prizes have now either become physicians or are attending medical schools, further attesting to the effect of this program, now, therefore, be it

Resolved, That the House of Delegates of the Mississippi State Medical Association in regular session assembled in Jackson, Mississippi, on May 14, 1964, recommends that the Mississippi State Medical Association sponsor three state prizes to be given in the name of the Mississippi State Medical Association in the Annual National Essay Contest conducted through the sponsorship of the Association of American Physicians and Surgeons, and be it further

Resolved, That these prizes be presented to the winners at a meeting of the House of Delegates at the annual meeting of the Mississippi State Medical Association.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

This resolution was introduced by Dr. R. J. Moorhead, Delegate from Yazoo County. The resolution seeks approval of the association in granting prize money for the high school essay contest sponsored by the Association of American Physicians and Surgeons. Your reference committee had the benefit of extended discussion in this connection and appreciation is expressed to all members who contributed in this connection. A majority of opinion expressed to your committee was in opposition to this resolution. A consensus of opinion held that this national organization, consisting of dues paying members, should conduct its own projects and your reference committee accordingly recommends that Resolution No. 8 be not adopted.

The report of the reference committee was adopted.

RESOLUTION NO. 9, MEDICAL CARE FOR THE INDIGENT

Dr. C. D. Taylor, Jr.: WHEREAS, The 1964 Regular Session of the Mississippi Legislature has enacted House Bill 135, relieving physicians from joining in the determination and certification of the indigency of persons qualifying for indigent hospital care under the State Hospital Commission program, and

WHEREAS, Private physicians were formerly required to certify as to the indigency of such patients, and

WHEREAS, The position of the Mississippi State Medical Association has been to render such care without charge to the patient, and

WHEREAS, Individual physicians feel that under the new law, the possibility may exist that they may be rendering care on a charity basis not of their own choosing, now, therefore, be it

Resolved, That the Mississippi State Medical Association reexamine its position in relation to the treatment of charity patients admitted to hospitals under the State Hospital Commission program in the light of this new enactment.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

This resolution, introduced by Dr. C. D. Taylor, Jr., in behalf of the Coast Counties Medical Society, recommends that the association reexamine its position in relation to the treatment of charity patients admitted to hospitals under the State Hospital Commission programs in the light of enactment of H.B. 135 by the 1964 Regular Session of the Mississippi Legislature. Your reference committee approves this resolution and recommends that it be referred to the Board of Trustees for study and reporting.

The report of the reference committee was adopted.

RESOLUTION NO. 10, BLUE SHIELD FEES

Dr. C. D. Taylor, Jr.: WHEREAS, Fees and payments for medical care allowed by Blue Cross for hospital coverage have gradually increased with concomitant increases in premium costs, and

WHEREAS, Blue Shield fees and payments have not increased materially for professional services rendered by physicians in a number of years, and

WHEREAS, Many procedures of both surgical and medical natures are completely omitted under Blue Shield schedules of benefits, now, therefore, be it

Resolved, That the Mississippi State Medical Association through its 12 directors of Blue Cross-Blue Shield Plan exert an effort to re-evaluate Blue Shield payments in the light of present medical care costs.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

This resolution, introduced by Dr. C. D. Taylor, Jr., in behalf of the Coast Counties Medical Society, asks that the state association, through its 12 directors of the Blue Cross-Blue Shield Plan, the Mississippi Hospital and Medical Service, exert an effort to re-evaluate Blue Shield payments in the light of present medical care costs. Your reference committee approves this resolution and recommends that each director be individually notified of this action and requests that the 12 directors inform the Board of Trustees of their evaluations findings and actions in this specific connection.

The report of the reference committee was adopted.

RESOLUTION NO 11, CONFERRING OF SPECIAL HONOR

Dr. John B. Howell, Jr.: WHEREAS, H. H. McClanahan, Jr. of Columbus, has served with distinction as a member of the Board of Trustees since 1952 and as it Chairman since 1958, and

WHEREAS, Dr. McClanahan has, on many occasions, represented our association with unusual capacity and ability before committees of the Congress, with public and private organizations, and at convocations of national importance, and

WHEREAS, Dr. McClanahan richly deserves to be recorded as one of our outstanding leaders upon whom we have and will continue to depend, now, therefore, be it

Resolved, That this House of Delegates does proclaim Dr. H. H. McClanahan, Jr., as Trustee Emeritus of the Mississippi State Medical Association and does invest him with this designation of honor for life.

ACTION OF THE HOUSE OF DELEGATES

After presenting the resolution, Dr. Howell, the vice chairman and acting chairman of the Board of Trustees, stated that it was presented in behalf of the Board. He asked unanimous consent for a suspension of the rules and consideration of the resolution. Without objection, the rules were suspended, and Dr. Howell moved adoption of the resolution, second by Dr. Stanley A. Hill of Corinth, unanimously adopted by a standing vote of the House of Delegates.

ADDITIONAL ACTIONS OF THE HOUSE OF DELEGATES

Dr. Victor E. Landry of Lucedale reported his attendance upon the annual session of the Louisiana State Medical Society as fraternal delegate. Mrs. Mal S. Riddell of Winona, 1963-64 Auxiliary president, and Mrs. Thomas J. Safley, Jr., of Jackson, 1964-65 Auxiliary president, addressed the House of Delegates and were accorded a standing ovation. Dr. C. D. Taylor, Jr., of Pass Christian, speaking in behalf of the Coast Counties Medical Society, invited the 97th Annual Session to meet at Biloxi, and the invitation was unanimously accepted.

OFFICIAL ATTENDANCE

The official attendance was announced as being 916 to include 498 physicians, 204 members of the Auxiliary, and 214 others.

REPORT OF THE REFERENCE COMMITTEE ON RULES AND ORDER OF BUSINESS

Conduct of Business. Your reference committee commends the Speaker and Vice Speaker for the

outstanding manner in which they have conducted the business before this House of Delegates. We believe that all members will wish to associate themselves in this commendation and an expression of appreciation to these officers. Realizing that Dr. O'Mara will no longer serve as Speaker of the House, the committee requests that he be given a standing ovation for his services in past years for a job well done and a gavel well swung.

Communications to the House of Delegates. It is felt that the conduct of business of the House of Delegates is such that patient deliberation is necessary at all times. The volume of work which must be considered and examined is great and, therefore, your Reference Committee on Rules and Order of Business feels that in the future only printed materials relative and pertinent to the action of the House of Delegates should be distributed within the meeting room.

Resolution. Your reference committee desires to offer the following resolution for consideration by this House of Delegates:

WHEREAS, The 96th Annual Session of the Mississippi State Medical Association has been conducted at Jackson, Mississippi, during the period May 11-14, 1964, and

WHEREAS, The annual session has been most profitable and enjoyable for all who have been in attendance, now, therefore, be it

Resolved, That expressions of deep appreciation are made to the officers, Trustees, and Council on Scientific Assembly for the stimulating and useful scientific program; to the efficient managements of the participating hotels, particularly the Heidelberg and King Edward; to the press, radio, and television for coverage of our activities; to the gracious ladies of the Auxiliary who always contribute so substantially to our meetings; to the technical exhibitors and their professional service representatives; to our scientific exhibitors; to the distinguished essayists who appeared before the Congress on Health Quackery; and to all who shared in the responsibilities of planning, organizing, and conducting this great annual session.

Your reference committee recommends adoption of this resolution.

The report of the reference committee was adopted and Dr. O'Mara, the retiring Speaker, was accorded a standing ovation.

REPORT OF THE ELECTION OF OFFICERS

President-elect: Everett H. Crawford, Tylertown

Secretary-Treasurer: James L. Royals, Jackson

Vice Presidents: Rhea L. Wyatt, Holly Springs; Paul B. Brumby, Lexington; W. W. Walley, Waynesboro

Speaker of the House of Delegates: Howard A. Nelson, Greenwood

Vice Speaker of the House of Delegates: William E. Lotterhos, Jackson

Associate Editor: George H. Martin, Vicksburg

Delegate to AMA: George E. Twente, Jackson

Alternate Delegate to AMA: Stanley A. Hill, Corinth

Board of Trustees: Charles W. Patterson, Rosedale, District 1; Joseph B. Rogers, Oxford, District 2; J. T. Davis, Corinth, District 3

Council on Budget and Finance: Daniel L. Hollis, Biloxi

Council on Medical Education: E. LeRoy Wilkins, Clarksdale

Council on Constitution and By-Laws: John B. Howell, Jr., Canton

Council on Legislation: Paul B. Brumby, Lexington, District 4; William E. Lotterhos, Jackson, District 5; Lamar Arrington, Meridian, District 6

Judicial Council: A. T. Tatum, Petal, District 7; G. Swink Hicks, Natchez, District 8; W. J. Weatherford, Pascagoula, District 9

Council on Medical Service: T. E. Ross, Hattiesburg, District 7; Richard J. Field, Jr., Centreville, District 8; James T. Thompson, Moss Point, District 9

Blue Cross-Blue Shield Directors: G. Swink Hicks, Natchez; R. B. Caldwell, Baldwyn; George H. Martin, Vicksburg; T. E. Ross, Hattiesburg

Fraternal Delegates: To Alabama, W. T. Oakes, Amory; to Arkansas, C. G. Sutherland, Jackson; to Louisiana, Victor E. Landry, Lucedale; to Tennessee, Stanley A. Hill, Corinth

CONSTITUTION AND BY-LAWS

At the close of business, there were no pending amendments to the Constitution or By-Laws of the association.

CLOSING CEREMONIES

There being no further business, the Speaker returned the gavel to the President, Dr. Archer. The Oath of Office was administered to Dr. Omar Simmons, the President-elect, by Dr. John B. Howell, Jr., Vice Chairman and Acting Chairman of the Board of Trustees, after which Dr. Simmons addressed the House.

Dr. James Grant Thompson presented the Thompson Memorial Past President's Pin to Dr. Archer.

The House of Delegates was adjourned *sine die* at 4:19 o'clock in the afternoon, May 14, 1964.

The President Speaking

'United We Shall Stand'

OMAR SIMMONS, M.D.
Newton, Mississippi

MEDICINE MUST BE UNITED if it is to serve the public in the future to the same high degree that it has in the past." These were the first words spoken by Dr. Norman A. Welch of Boston after his formal inauguration as the 118th president of the American Medical Association at San Francisco. Addressing his remarks first to the presidents of the 54 state and territorial medical associations and the recognized specialty societies, Dr. Welch asked that American physicians "stand strong and firm with a heart and a conscience tuned to the public need."

This inspiring moment dramatized the urgency of the need for unity among all physicians. Earlier during the AMA convention, Dr. E. B. Howard, assistant executive vice president, told a meeting of medical executives that "unity among us all is our number one goal."

It is clear that there was little unity among British physicians in 1948 when the National Health Service swallowed up the profession and that nation's hospitals. It is similarly clear that there is lack of unity when specialization fragments any profession, and it can happen here. We American physicians must never permit what has been gained in depth to be lost in breadth, and we shall not.

The age in which we live has broadened medicine's horizon: two dimensions, the art and the science, are no longer valid measurements. The third must now include skills in the socioeconomic and political areas, if we are to preserve a free, unfettered system which assures our patients both quality and the exercise of choice. All of this demands unity among us, and in the words of Dr. Welch: "Only one organization represents us all, acts for all of us, serves us, and asks each of us, no matter what our specialty, to take part in its activities. That is the American Medical Association." In AMA, united we shall stand. ★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume V, Number 8

August 1964

EDITORIALS

Youth Fitness: New Vote Pawn in Political Chess

I

America's draft-age youth are the latest target for federal benevolences, after having been weighed in a loaded balance and found wanting as to their physical and mental states. In a report mislabeled "One-Third of a Nation," a federal task force said that one-third of all young Americans reaching 18 years of age would be found unfit for induction into the armed forces. On the same day the report was released to the public, the President ordered draft examinations for all 18 year old males.

The task force report said that rejectees fall into two groups: Those who are physically disqualified and those who fail to meet mental standards for military service. Of the former group, there was a charge of "insufficient health services" followed by the opinion that 75 per cent of all persons rejected for failure to meet the medical and physical standards would probably benefit from treatment.

Those failing to meet mental standards were said to have inadequate education, coming from families where parents were similarly without sufficient formal education. This, too, lacks the documentation which is expected in a formal pronouncement of the United States government. In fact, the entire report and the White House action smell like Granby Street in Norfolk when the fishing fleet comes in on a hot day.

II

President Johnson called the task force finding "a situation more serious and more extensive than has been our understanding." Acting on a report of doubtful validity, shaky statistics, and flimsy fact, the President ordered the medical examination of the 18 year olds on the day it was released to the public. There was no discussion, no consultation with those possessing expertisé in the medical and health fields outside the government, and no opportunity for consideration by the Congress.

Moreover, the President directed that special job training, education and health programs, and corrective measures be established to overcome the deficiencies which the task force had identified. This summary executive action seems to prove the crass political nature of the entire matter. Now, it appears, 1600 Pennsylvania Avenue has not only established criteria for economic poverty, but it also says on the basis of one doubtful document who among the nation's youth is and is not fit.

Commenting on this action, the American Medical Association was moved to conclude that "a program of this size, with its many implications,

deserves the serious consideration of our lawmakers, of nongovernmental experts in medicine, education, vocational guidance, and rehabilitation. It should not be allowed to come into being on the basis of a hasty, poorly substantiated political belief."

III

The report is as full of holes as a fine Swiss cheese. To begin, the title, "One-Third of a Nation," is something of an overstatement, since it is actually dealing with an alleged one-third of draft-liable American males. None of its gloomy findings bears any relation to the entire population of the United States.

Presumably, the findings are based upon a nationwide survey, but the truth of the matter is that research consisted of interviews at about 200 local Selective Service Boards in 37 states. Thirteen states were purposely excluded by the task force "because of low rates (of rejection) and (the) small number of rejectees." No distinction was made between urban and rural rejectees, nor were the number of interviews conducted in each state disclosed. Interviews were held during normal office hours, suggesting that a majority of those seen were not regularly employed.

The tabulations in the study imply that all interviewees answered all questions asked. Paradoxically, 24 per cent said that they did not live with their parents, and another 23 per cent said that their fathers were not present in the household. Yet, every interviewee was represented as giving information on his father's education and activity. The table on medical disqualification is based on examinations performed from 1953 through 1958, some four to nine years before the task force was appointed.

IV

Another observation of AMA is richly deserving of emphasis: "It is significant that the task force fails to consider that many males medically disqualified for military service are not examples of 'insufficient health services,' (but) individuals who, with poorer health services, would not even be alive to be examined."

The medical profession is quite aware that most Americans enjoy basically good health. Among those in the 18 to 20 year age bracket, this is especially true. Draft rejection is not nearly so much a matter of the mean physical and mental capacities of these young people as it is of military criteria. On the other hand, there is no justification for twisting the health condition of the nation's youth into a patently political issue.

Physicians will quickly see through this transparent hankie-pankie as another federal finger in the vote pie. The tragedy of it all, as with the aging and King-Anderson legislation, is that the health of the nation, our most vital resource, is the pawn in a political chess game where the rules never count.—R.B.K.

A Good Sport Is Getting Safer

The gleaming outboard rig in the carport—with a $4,000 automobile parked outside in the rain—is no longer a mere status symbol; it's now a way of life. On any given weekend, the highways abound with boat trailers tagging after the family auto as the Sunday commodores head for lakes, rivers, and ocean. The weekend water fraternity is enormous, and the flotilla includes everything from the homemade plywood dingy to the plush cabin cruiser.

Boating has plowed a wake across biostatistics with death and injury, but the sport is getting safer. Just as physicians have long maintained an active interest in safe motor vehicle operation, so have they developed a professional awareness of the American family on the water. But the cold figures don't tell the whole story, because the long term decrease in mortality for water transportation

"You'll soon be hearing the flip-flop of little wedgies."

accidents is doubly dramatized by the mushrooming increase in the numbers of boats and water sport enthusiasts.

In 1950, just over 1,500 Americans lost their lives in watercraft, more than 90 per cent of which were small boats. The death rate was 10 per million population. Twelve years later in 1962, the latest year for which complete data are available, exactly 1,445 deaths were reported among which only 1,190 occurred in small boats, a rate of 6.4 per million population. In the intervening span of time, boat ownership quadrupled.

Four fifths of the deaths are from drownings in small watercraft with a passenger capacity of less than 10 persons. More than half of the fatalities occur in the four months May through August, and the death rate is highest by far in the 20-24 age group at a whopping 27.9 per million population. Nine out of 10 victims are male. Surprisingly enough, only 10 per cent of the deaths occur on oceans, the Gulf, and Great Lakes; most are in nontidal waters. The outboard propelled boat is the chief killer, too.

But the picture is better, and decreases in mortality from boating accidents were noted in all age groups in 1962. It's obvious that Americans are not only enjoying but living longer on the water.—R.B.K.

Fedicare Is Out, But Physicians Are In

As at Gettysburg, the victory is hollow. The King-Anderson bills, H.R. 3920 and S. 880, the fedicare proposals, were shelved by the House Committee on Ways and Means when Rep. Cecil King (D., Calif.) declined to call his measure up for consideration at the final executive session of the group. Despite rumors, forecasts, and columnists' prognostications, the votes were never there during the entire second session of the 88th Congress to get the legislation out of committee.

But the measures should not be dismissed, merely because they have been beaten every election year since the original Forand bill bit the dust in 1960. There could, of course, be a final push to tack fedicare onto a senate bill, and it's been tried before.

Unhappily, 1964 is a general election year. As has been the case on many such occasions since passage of the Social Security Act in 1935, there will most probably be an extension of the OASDI compulsory "coverage" and liberalization of benefits. On the day following the apparent defeat of King-Anderson, the Committee on Ways and Means announced legislation providing a 5 per cent increase in cash benefits to Social Security cash benefits and *compulsory inclusion of physicians in the tax program.*

The taxable wage base would be raised to $5400 annually from the present $4800, and the respective taxes upon employee and employer would be increased from the present 3⅝ per cent to 4 per cent in 1966 with escalator schedules up to 4.8 per cent—a total of 9.6 per cent—after 1969. That is $518 per year for the wage earner with an annual income of $5400, more than a family with two children must pay in federal income taxes.

For the self-employed, and this includes most physicians, the tax will be 5.7 per cent next year, scaled up to 7.2 per cent, a neat $388.80 for each doctor. As with the "hope as you pay" program's history, these new tax bites will be barely sufficient—if at all—to pay increased benefits of $254 per month for families and $127 for individuals. If this measure is enacted, the flim-flam of government-provided security will be nearly complete. —R.B.K.

LETTERS

SIRS: For five months it was my privilege to serve as staff nurse in the association's Emergency Medical Care Unit at the Capitol during the 1964 Regular Session of the Legislature. In the January-to-June period, I served with nearly 70 physicians who represented almost every area of the state as "Doctors of the Day."

In my 25 years experience as a registered professional nurse, I have enjoyed no service more than this satisfying and rewarding duty with the Mississippi State Medical Association. I am deeply grateful to the physicians who, by coming to Jackson and giving a day in the care unit, demonstrated the great sense of civic and public service responsibility which is characteristic of the medical profession. I can assure you from my day-to-day experience that the members of the Legislature appreciated this service provided by the association. On more than one occasion, the presence of a physician was the critical difference to health and life when members of the Legislature were stricken.

I hope that I was able to represent you well, and I thank you for this opportunity of serving in your worthy project.

ILA G. MCCLEAVE, R.N.
JACKSON, MISSISSIPPI

SIRS: The American Medical Society of Vienna is most grateful to the Mississippi State Medical Association for its kindness in sending the Society a complimentary subscription to the JOURNAL MSMA. The American Medical Society was founded in 1879 and since that time almost 33,000 American doctors have attended courses which were arranged by the Society and given by members of the Medical Faculty of the University of Vienna. Presently we have many doctors from Mississippi registered as life members.

M. ARTHUR KLINE, M.D.
EXECUTIVE SECRETARY
AMERICAN MEDICAL SOCIETY
OF VIENNA
VIENNA, AUSTRIA

The following physicians have been elected to membership in their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

SANDERS, WILLIAM CLAUDE, Columbus. Born Columbus, Miss., Dec. 17, 1931; M.D., University of Tennessee College of Medicine, Memphis, 1956; interned Charity Hospital of Louisiana, New Orleans, one year; general surgery residency, Baptist Memorial Hospital, Memphis, Tenn., one year; orthopedic surgery residency, University of Mississippi School of Medicine, Jackson, one year; orthopedic surgery residency, Mississippi Baptist Hospital, Jackson, three years; elected June 9, 1964, by Northeast Mississippi Medical Society.

SPELL, JAMES PATRICK, Jackson. Born Collins, Miss., Sept. 1, 1929; M.D., Tulane University School of Medicine, New Orleans, La., 1954; interned Baptist Hospital, Nashville, Tenn., one year; surgical residencies, University of Mississippi School of Medicine, Jackson, and Memorial Hospital, New York City; elected May 5, 1964, by Central Medical Society.

State Morbidity Reported Through June 26

The Mississippi State Board of Health reports the following occurrence of morbidity for 1964 through the 26th week of the year, ending June 26, 1964. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	499
Tuberculosis, O. F.	118
Salmonella Infections	15
Brucellosis	1
Encephalitis, infectious	16
Typhoid Fever	2
Dysentery	
Bacillary	38
Amoebic	8
Dysentery, N.O.S.	1
Food Poisoning, N.O.S.	1
Diphtheria	2
Septicemia, Staph.	4
Meningococcal infection	11
Meningitis, O. F.	17
Gastro-enteritis	1
Tularemia	3
Mononucleosis, infectious	48
Toxoplasmosis	1
Hepatitis, infectious	120
Tetanus	1
Helminthic infections	
Hookworm	491
Ascariasis	154
Strongyloides	25
Histoplasmosis	11
Streptococcus infections	
Scarlet fever	118
Strep throat	2,295
Taeniosis	2
Pertussis	81
Measles	6,633
Chickenpox	1,044
Mumps	895
Other Cestode Infestations	7
Influenza	363
Gonorrhea	2,709
Syphilis	
Early	207
Late	92

Book Reviews

Crossen's Synopsis of Gynecology. By Daniel Winston Beacham, M.D., Associate Professor of Clinical Obstetrics and Gynecology, Tulane University School of Medicine, New Orleans, La., and Woodard D. Beacham, M.D., Professor of Clinical Obstetrics and Gynecology, Tulane University School of Medicine, New Orleans, La. 360 pages with illustrations. St. Louis: The C. V. Mosby Company, 1963. $7.50.

As it is so well stated in the preface of the first edition of *Crossen's Synopsis of Gynecology,* this book was primarily written to the group of medical students and physicians whose interest in gynecology is such that a knowledge of only the general principles and salient features of the subject is necessary to a well rounded medical education. It is an inexpensive manuscript, well outlined to cover the entire scope of gynecology and written in a clear concise manner to present the basic factual knowledge of gynecology purposefully omitting many other more controversial discussions.

In chapter one there is a basic review of the anatomy and physiology of the reproductive organs. Chapter two gives a vivid and masterful discussion of the art of taking a thorough history and making a complete gynecologic examination, the basic information that leads to a sound diagnosis. Also included in this chapter is discussion of the psychosomatic aspects of gynecology, which all of us realize is pertinent to the field of our present day practice of gynecology.

Chapter three progresses with a study of malformations and associated embryology and the ensuing chapters with diseases and tumors that involve the vulva, vagina, cervix uteri, corpus uteri, ovary, and fallopian tubes. Endometriosis and pelvic infections, as they involve the entire reproductive organs, are given separate chapters of discussion and the most modern methods of diagnosis and treatment are outlined.

In the closing chapters, the student's knowledge is made complete with a consideration of the complications of pregnancy, i.e., abortions, ectopic gestations, and diseases of the trophoblast, and also of disturbances of function of the female genital tract, which include amenorrhea, dysfunctional uterine bleeding, dysmenorrhea, premenstrual tension, dyspareunia, sexual frigidity, infertility, the climacteric and the breasts in relation to gynecology.

In the sixth edition, although the style of writing is unchanged, the book has been brought up-to-date by its present authors, David Winston Beacham and Woodard Davis Beacham of Tulane University. Information regarding chromosomal counting, the induction of ovulation with human pituitary extracts and Clomiphene, the bio-chemistry of ovarian steroids, chemotherapeutic agents as used in treatment of some malignancies, the use of synthetic progestins, and septic shock due to endotoxins is given in their appropriate chapters, and illustrations are used throughout to clarify the subject material.

This book is highly recommended to the medical student as a guide to his study of gynecology, to the instructor as he prepares his lectures to students and student nurses, or to the busy practitioner who wishes to review the field of gynecology in an effort to remain abreast of the more recent advances in this field.

WALTER L. BOURLAND, M.D.

Physiology of the Circulation in Human Limbs in Health and Disease. By John T. Shepherd, M.D., Professor of Physiology, Mayo Foundation Graduate School, University of Minnesota, Rochester, Consultant, Section of Physiology, Mayo Clinic. 416 pages with 179 illustrations. Philadelphia: W. B. Saunders Company, 1963. $12.00.

Dr. Shepherd has not been able to put together a very readable book for the student or physician to peruse, but indeed such was not his purpose in this text. He has done an excellent job of bringing together in one source an exhaustive bibliography with an adequate and well-systematized discussion of the physiology of the peripheral circulation. While the text is primarily a review of the literature on the many facets of this subject, it is apparent to the reader that the author is presenting the subject in an authoritative fashion. This is apparent both from the comprehensive nature of the text as well as the many references of which Dr. Shepherd is author or co-author. There is a wealth of concise information on humoral elements, e.g. norepinephrine, and chemicals, e.g., nicotine which is of interest to all dealing with vascular

problems. The text should be in the library of every one primarily interested in cardiovascular disease. It will be welcomed by all who are involved in cardiovascular research. The average physician will find portions of the text dealing with the altered physiology of orthostatic hypotension and Raynaud's disease informative.

F. EARL FYKE, JR., M.D.

Saunders Announces Recent Publications

W. B. Saunders Company features the following new books and new editions in their full page advertisement appearing elsewhere in this issue:

MOORE—GIVE AND TAKE
New!—An intriguing volume relating the inspiring story of tissue transplantation, from its beginnings to modern-day successes.

NELSON—TEXTBOOK OF PEDIATRICS
New (8th) Edition!—Up-to-date help on how to treat the ill child and how to keep the well child healthy.

ELLIOTT—CLINICAL NEUROLOGY
New!—The latest help, ranging from material on the mechanics and physics of brain injuries to advice on the interpretation of somatic pain.

FRED ALLISON, JR., and HERBERT G. LANGFORD have been elevated to professor of medicine at the University Medical Center, both from the rank of associate professor. In other staff changes, FORREST T. TUTOR's rank was up from assistant professor to associate professor of neurosurgery, and five instructors have been made assistant professors. They are ROGER B. ARHELGER, pathology; M. F. JURKO and DUDLEY F. PEELER, neurosurgery; JOSE M. MONTALVO and NELL RYAN, pediatrics.

T. H. BLAKE, T. S. EDDLEMAN, W. C. WARNER, and J. G. CADEN of Jackson have announced the association of MCWILLIE ROBINSON, JR., and LOUIS A. FARBER in the practice of orthopedic surgery.

LAWRENCE H. BRISCO of Tupelo has announced the association of CECIL T. WILLIAMS, JR., in the practice of general medicine and obstetrics.

RALPH BROCK has been inaugurated as president of the McComb Rotary Club.

LAURENCE J. CLARK JR., has joined the Street Clinic in Vicksburg in the Department of Internal Medicine. Dr. Clark received his pre-medical and medical training at the University of Mississippi and interned at Tampa General Hospital in Tampa, Fla. He took his residency at the Confederate Memorial Medical Center in Shreveport, La., and at the University of Mississippi Medical Center in Jackson.

JOHN P. ELLIOTT, JR., of Tupelo has announced the opening of his office for the practice of urology.

S. C. GALLOWAY and WAYNE A. LINDSEY have announced their association in the practice of general medicine in Booneville.

JAMES D. HARDY, professor and chairman of the Department of Surgery, University of Mississippi School of Medicine, will be a guest speaker for the 69th Annual Scientific Sessions of the Utah State Medical Association in September.

KARL W. HATTEN has joined the Department of Internal Medicine of the Vicksburg Clinic.

BENTON E. HEWITT of Summit has been installed as president of the Lions Club.

GEORGE W. OWEN of Jackson has announced the association of ELLIS W. MOFFITT in the practice of allergy.

HUNTER L. SCALES, SR., of Starkville has completed 50 years of service with the Illinois Central Hospital Department as local surgeon. In recognition of his long service, he was recently honored at a luncheon at the Palmer House in Chicago and was awarded a gold plaque.

EDSEL F. STEWART has opened his office in McComb for the practice of obstetrics and gynecology.

B. C. TUBB of Smithville was featured in a recent article in the *Amory Advertiser* headlined "5,000 babies and 55 years." Dr. Tubb, now 85, has practiced in Smithville since 1909 and still sees his patients. He began his practice in a horse and buggy and later graduated to a Model T, the first of 42 cars he has used visiting patients. In 1909, noted Dr. Tubb, the going cost for delivery of one baby was about $7.50 but by 1911 the cost had already gone up to $10.

49,000 Attend AMA 113th Convention; Culpepper and Hill Represent MSMA

Over 49,000 registered at AMA's 113th Annual Convention at San Francisco during the last week in June as the Golden Gate was opened to American medicine. Physicians present totaled more than 14,000, hearing a thousand papers and viewing 500 exhibits and almost continuous medical color television. Even the San Francisco Giants rose to the occasion, beating the Dodgers 2-1 in a 13 inning thriller the last night of the conclave.

A serious moment in the AMA House of Delegates at San Francisco has full attention from Mississippi's J. P. Culpepper, Jr., and Stanley A. Hill. Dr. Hill was seated for Dr. George E. Twente who was recovering from illness.

The 22 scientific sections each presented two and three day meetings with special feature symposia on hyperbaric oxygen therapy, computers in medicine, organ transplantation, and discussions on heart, liver disease, endocrinology, and autoimmune diseases. Other subjects showing up in the 330 page scientific program included retirement, tobacco, space, Cuba, lasers, and teen-age pregnancy.

Drs. J. P. Culpepper, Jr., of Hattiesburg and Stanley A. Hill of Corinth represented the state medical association in the House of Delegates which conducted its longest session in recent years. Dr. Hill, alternate delegate, was seated for Dr. George E. Twente of Jackson who was recovering from personal illness at the time of the meeting.

Leading the Mississippi delegation were Drs. Omar Simmons of Newton, association president, and Everett H. Crawford of Tylertown, president-elect. Dr. William E. Lotterhos of Jackson was in the scientific assembly where he was elected vice chairman of the AMA Section on General Practice. More than a score of state physicians were present. Mrs. Thomas J. Safley, Jr., of Jackson, state Auxiliary president, led the delegation to the ladies' meeting.

Delegates met Sunday through Thursday, considering 74 resolutions and as many reports. They pronounced tobacco usage "a serious health hazard," updated the historic Hess Report on physician-hospital relations, reaffirmed a prior position against denial of membership because of race, color, or creed, and saw a preview of the three year study on the cost of medical care.

A survey and accreditation program for continuing medical education was approved, and the House recorded its firm opposition to federal subsidy of voluntary prepayment and health insurance plans. At the same time, they held to the "bricks and mortar" concept of multiple financing of medical facilities with federal funds but ordered extensive studies in this area. A stepped-up communications program was endorsed, and action was initiated toward providing a teletype network linking AMA headquarters at Chicago to each state medical association executive office.

An expanded program in medical ethics with emphasis on professional and public education was approved, and studies were requested on problems of unwed mothers and child abuse.

In opening ceremonies, Dr. Edward R. Annis of Miami, 1963-64 president, asked for vastly increased programs of activity in both the scientific and socioeconomic sectors of medical activity. On the stage as he addressed the first general session were the presidents of the 54 state

and territorial medical associations and of the recognized national specialty societies.

Dr. Norman A. Welch of Boston was inaugurated as the 118th president in impressive ceremonies, and delegates named Dr. Donovan F. Ward of Dubuque, Iowa, president-elect. Dr. Alvin J. Ingram of Memphis was elected to the Board of Trustees, and Dr. Carlton Wertz of Buffalo, N. Y., was selected as vice president.

Top scientific honor went to Dr. Irvine H. Page, director of research at the Cleveland Clinic, for

It's a three way floor conference as Drs. J. P. Culpepper, Jr., Carroll L. Witten of Louisville, Ky., delegate from the Section on General Practice, and W. Linwood Ball of Richmond, Va., former AMA vice president and delegate from Virginia, discuss matters before the House.

his investigations of cardiac, vascular and renal disease. He received the 1964 AMA Distinguished Service Award. The Hektoen Gold Medal was awarded to Dr. Richard C. Lillehei and associates of Rochester, Minn., for the best scientific exhibit.

Mrs. William H. Evans of Youngstown, Ohio, was inaugurated president of the Woman's Auxiliary, and Mrs. Richard A. Sutter of St. Louis was named president-elect.

Convention sidelights included a special presentation to Raymond Massey, the distinguished actor who portrays Dr. Leonard Gillespie in the "Dr. Kildare" television series. Both he and the show's producer, David Victor, were honored at the annual delegates dinner. Miss America of 1964, Donna Axum of Arkansas, was featured at the annual breakfast given by the Arkansas Medical Society honoring officers and delegates.

Mississippians congratulate two top AMA leaders following adjournment. From the left, Drs. Stanley A. Hill, Alvin J. Ingram of Memphis, newly elected trustee, Norman A. Welch of Boston, AMA president, Omar Simmons of Newton, MSMA president, and Everett H. Crawford of Tylertown, MSMA president-elect.

The American Medical Political Action Committee sponsored a banquet before which Rep. William E. Miller (R., N. Y.), chairman of the Republican National Committee, and Sen. Thomas J. Dodd (D., Conn.) spoke.

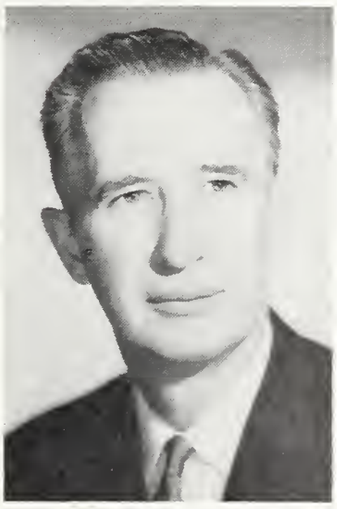
A special program on medicine and religion presented Rabbi Abraham J. Heschel of New York, distinguished theologian and professor of Jewish ethics at the Jewish Theological Seminary of America, and Dr. William C. Menninger of Topeka, Kan., president of the Menninger Foundation.

Drs. Julius Michaelson of Foley, Ala., president of the American Academy of General Practice, E. Bryce Robinson, Jr., of Fairfield, Ala., delegate and member of the AMA Council on Medical Education, and W. E. Noblin of Jackson discuss upcoming scientific programs at the San Francisco convention.

Dr. Lotterhos Is Named to AMA Post

A Mississippi medical leader has been named to a top post in the AMA scientific assembly with the election of Dr. William E. Lotterhos of Jackson as vice chairman of the Section on General Practice. He was elected during the San Francisco annual convention June 21-25.

Dr. Lotterhos currently serves as vice speaker of the House of Delegates and chairman of the Council on Legislation of the Mississippi State Medical Association. He is a past secretary-treasurer and has chaired a number of key committees. Active also in the American Academy of General Practice, he serves as a delegate from Mississippi and has held other important national posts in addition to that of president of the state academy. He served both as secretary and president of the Central Medical Society.



Dr. Lotterhos

More than 50 essayists and panelists appeared before the general practice section during three days of the meeting. Officers elected were Drs. Dudley M. Cobb, Jr., of Calif., chairman; Dr. Lotterhos, vice chairman; Nicholas J. Pisacano of Ky., secretary; Bernard P. Harpole of Ore., assistant secretary; Carroll L. Witten of Ky., delegate; Maynard I. Shapiro of Ill., alternate delegate; and Max Johnson of Calif., representative to the scientific assembly.

UMC Team To Study Toxemia of Pregnancy

Toxemia and hypertension of pregnancy is the subject of a research study which will be supported by a $104,627 grant to Dr. Herbert G. Langford, professor of medicine at University Medical Center. The grant from John A. Hartford Foundation, Inc., of New York City, will support investigation of epidemiological and clinical studies on eclampsia and pre-eclampsia of pregnancy.

Three population groups will be included, two of which have an unusually high incidence of these dangerous conditions and the high blood pressure associated with them.

The department of medicine investigators hope to determine factors which predict which patients will have pre-eclampsia toxemia, determine the affect of pre-eclampsia on the subsequent development of hypertension, and find out the effect of preventive therapy on later hypertension.

Records show that patients in one ethnic group having their first babies in University Hospital have a 35 per cent incidence of toxemia, far above the national average. Those with elevated blood pressure midway during pregnancy demonstrated greater tendencies toward developing pre-eclampsia, and the thiazide-type drugs appeared to reduce the hazard to near-normal, the investigating team says. Clinic records show that almost all girls from the same ethnic group have higher-than-normal blood pressure by age 18.

To check the significance of these facts, the Medical Center team has requested the cooperation of Public Health and city school officials to survey blood pressure and perform other diagnostic studies among this group. Those who are later admitted to the University Hospital obstetrical ward will become part of the study to determine the effect of thiazide therapy and the reasons for hypertension and toxemia.

AMA Committee Surveys State Nursing Liaison

As a part of their ongoing program, the AMA Committee on Nursing recently queried 52 state and territorial medical societies regarding their liaison with members of state nursing organizations.

The data received from the questionnaires showed that 41 of 50 state societies responding conduct active liaison programs of one type or another with nursing groups. The subjects discussed at the joint meetings which are of greatest concern to physicians were nursing education, the physician-nurse relationship, patient care, and the shortage of nurses.

Suggestions for improving the nurse-physician relationship, in order of their highest frequency of

occurrence, were to improve understanding and communication through joint effort, to establish nurse liaison within the states, and to meet frequently with nursing groups.

The committee noted that the nine states with no organized form for the exchange of ideas included several with a high percentage of nurses and physicians.

The Committee on Nursing presented its findings in the May 18, 1964, issue of the *Journal of the American Medical Association.*

University Names Computer Center Director

Dr. Darrell R. Shreve has been appointed director of the computer center at the University Medical Center to take up his duties July 1.

Dr. Shreve comes from North Carolina State College, Raleigh, where he has served as director of the computing center for the last four years after having held the same position at Oklahoma State University.

His previous experience includes faculty appointments at Purdue University and the University of Tulsa and employment in industry for 13 years, including 10 as a research mathematician for Jersey Products Research Co. He is a graduate of the University of Tulsa and received his M.S. at Oklahoma A & M. and his Ph.D. from the University of Illinois.

UMC Intern Carries On 132 Years of Tradition

As the fifth generation of his family to practice medicine in Mississippi, Dr. Lewis Dubard Lipscomb is carrying on 132 years of medical tradition.

Now an intern at the University of Mississippi School of Medicine, Dr. Lipscomb is a graduate of the Vanderbilt University School of Medicine. His great-great-grandfather, Dr. Dabney Lipscomb, practiced medicine in Columbus as did his great-grandfather Dr. William Lowndes Lipscomb. His grandfather, Dr. James W. Lipscomb, Sr., served at one time as president of the Mississippi State Board of Health. Young Dr. Lipscomb's father, Dr. J. Walton Lipscomb, Jr., has practiced medicine in Jackson for the past 30 years.

The Lipscomb family has served Mississippi medicine since 1832 when the first Lipscomb physician came to Lowndes County from Alabama.

DEATHS

Batson, Melbourne Lafayette, Jackson. M.D., University of Tennessee College of Medicine, Memphis, 1901; interned Vicksburg Charity Hospital; past president of South Central Mississippi Medical Society; Emeritus member of MSMA and member of the MSMA Fifty Year Club; died June 21, 1964, aged 84.

Butters, Herbert Lowell, Canton. M.D., University of Toronto Faculty of Medicine, Canada, 1926; interned St. Joseph's Hospital, Toronto, Canada, one year; member, Mississippi Public Health Association, American Public Health Association, and the American Association of Public Health Physicians; died June 17, 1964, aged 61.

Snavely, John Robert, Jackson. M.D., University of Chicago, Ill., 1939; interned Charity Hospital of Louisiana, New Orleans; residency, Charity Hospital of Louisiana, New Orleans; medicine fellowship, Tulane University School of Medicine, New Orleans, La.; professor and chairman, department of medicine, University of Mississippi School of Medicine, Jackson, for eight years, and assistant dean of the department of medicine, for seven years; served on faculty at Tulane University School of Medicine, New Orleans, La., for 13 years; member, Central and Southern Societies for Clinical Research, the American College of Physicians, American Society of Internal Medicine, the American Association for the Study of Liver Disease, American Association for the Advancement of Science, the American Federation for Clinical Research, the Mississippi Trudeau Society, and the Mississippi Heart Association; member of the editorial board of the Annals of Internal Medicine and served on the American Medical Association residency review committee; certified by the American Board of Internal Medicine; died June 12, 1964, aged 51.

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The name Pro-Banthīne (propantheline bromide) sets a stamp of therapeutic authority on any anticholinergic prescription.

Side Effects and Precautions—Urinary hesitancy, xerostomia, mydriasis and, theoretically, a curare-like action may occur. The drug is contraindicated in patients with glaucoma or severe cardiac disease.

Dosage—The usual adult dosage is one tablet of 15 mg. with meals and two at bedtime; this amount may be doubled or tripled for patients with severe conditions. Pro-Banthīne (brand of propantheline bromide) is supplied as tablets of 15 mg. and, for parenteral use, as serum-type ampuls of 30 mg.

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1. Roach, T. C.: Therapy of Peptic Ulcer, J. Louisiana Med. Soc. *115*:136-139 (April) 1963.
2. Steinberg, H., and Almy, T. P., Drugs for Gastrointestinal Disturbances, Chapter 21, in Modell, W. (editor): Drugs of Choice —1964-1965, St. Louis, The C. V. Mosby Company, 1964, p. 343.

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Arteriosclerosis Council Sets 18th Meeting

The Council on Arteriosclerosis of the American Heart Association will hold its 18th Annual Meeting on Wednesday, Oct. 21, and Thursday, Oct. 22, in Atlantic City's Hotel Shelburne, immediately preceding the annual Scientific Sessions of the Association. The Council sessions are open to all interested individuals.

Advance registration and hotel reservation forms may be obtained from the American Heart Association, 44 E. 23rd St., New York, N. Y. 10010.

Cardiovascular Surgery Topic of AHA Monograph

Thirty papers on cardiovascular surgery presented at the American Heart Association's 1963 Scientific Sessions in Los Angeles have been published in book form by the Association.

The 175-page book, entitled "Cardiovascular Surgery 1963," is published as seventh in the AHA Monograph Series. It reflects the strides made in the field of cardiovascular surgery in recent years.

Edited by Dr. F. A. Simeone, the volume sells at $3 a copy. It may be ordered from local Heart Associations or the American Heart Association, 44 East 23rd St., New York 10010.

'Medical Weekend' Set for Birmingham

Mississippi physicians are invited to attend an unusual "Medical Weekend in Birmingham" Sept. 12-15, 1964, which will feature lectures, seminars, and panel discussions by 56 physicians covering a broad range of subjects.

All programs will be at Birmingham's new Parliament House motor hotel. Social functions will be interspersed with the scientific meetings. A total of 22 hours of Category I credit will be al-

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lowed by the American Academy of General Practice for the programs.

The weekend opens Sept. 12 with a seminar on "Newer Concepts of Female Reproductive Physiology," featuring addresses by nine national leaders in obstetrical-gynecological education, research and practice. The visiting speakers will join Birmingham physicians for panel discussions on "Control of Ovulation-Contraception," "Hormonal Therapy of Endocrine Dysfunctions," and "Treatment of Infertility."

This will be followed Sept. 13 by the Seventh Annual Medical Progress Assembly of the Birmingham Academy of Medicine which opens that evening with a social hour and dinner at which University of Alabama football Coach Paul (Bear) Bryant will be speaker.

On Monday and Tuesday outstanding medical lecturers will discuss such subjects as headache, strokes, malabsorptive syndromes, the acutely injured patient, pediatric surgery, the acute abdomen, monitors in anesthetic practice, gastrointestinal bleeding, snakebite, shock, otosclerosis, and many other topics. Thirteen panel discussions will enable physicians to discuss subjects with distinguished lecturers on a more personal basis.

Special entertainment features for physicians and wives will include social hours, luncheons, dinners, dances, tours, and fashion show for the ladies. Door prizes will be awarded and refreshments will be served during intermissions.

Complete programs will be sent upon request to Ob-Gyn seminar or Medical Progress Assembly, c/o JCMS, 901 S. 18th St., Birmingham, Ala. 35205.

AHA Schedules 37th Annual Sessions

Registration forms may now be obtained for the 37th Annual Scientific Sessions of the American Heart Association, scheduled from Friday, Oct. 23, through Sunday, Oct. 25, in Convention Hall, Atlantic City, N. J.

(Turn to page 26)

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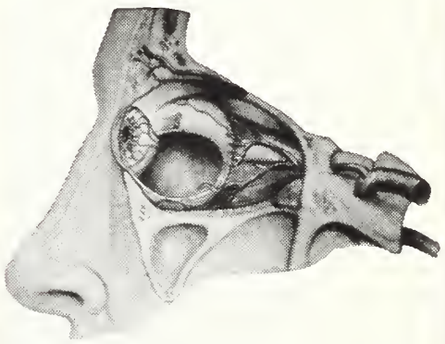

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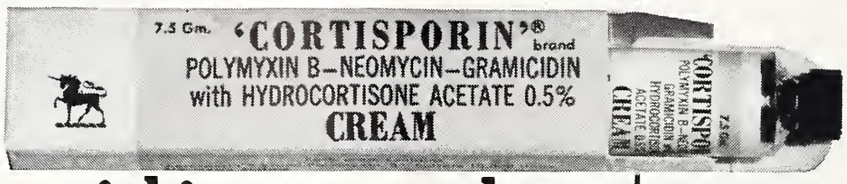

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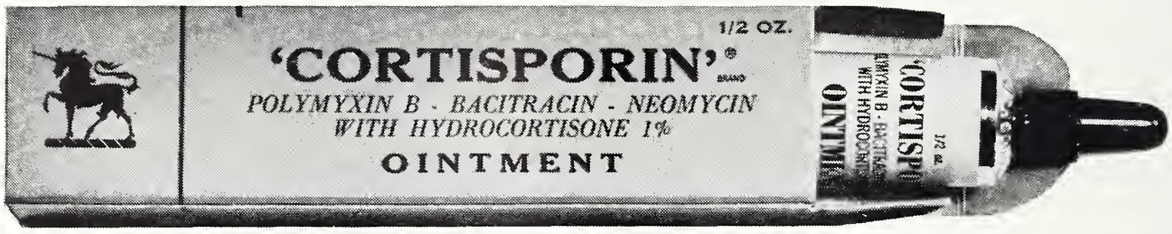

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CONTRAINDICATION: Anuria.

1. Steigmann, F., and Griffin, R.: Evaluation of Quinethazone, a New Diuretic. *J. Amer. Geriat. Soc.* 11:945 (Oct.) 1963.
2. Schwartz, M.: Office Evaluation of a New Diuretic in Patients with Hypertensive Diseases. Scientific Exhibit Presented at the Clinical Meeting of the American Medical Association, Los Angeles, California, Nov. 25-28, 1962.

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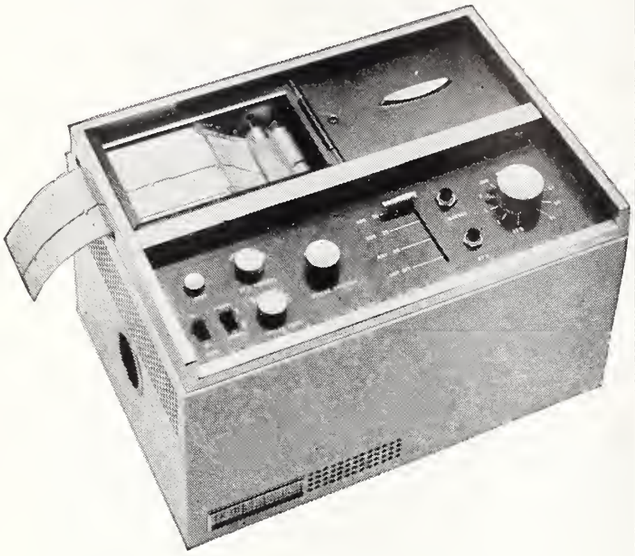

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AHA SESSIONS / Continued

Six Clinical Sessions of primary interest to the practicing physician will be held simultaneously with regular scientific sessions and programs covering a broad range of cardiovascular research. The clinical programs include the presentation of original investigative work in addition to panels, lectures, and symposia.

An all-day session on stroke, to be held on Saturday, Oct. 24, will cover aspects of special interest to the general practitioner, from prevention through long-term convalescent care.

Following is a tentative outline of the three-day program:

Friday, Oct. 23: The Clinical Sessions include presentation of the AHA's Research Achievement Award; the Conner Memorial Lecture, "Prospects for Heart and Other Organ Transplants in Man"; a lecture, "Use of Isotopes in Diagnosing Heart Disease," and a symposium on the physiological basis of cardiovascular symptoms. Simultaneous sessions will be held on arteriosclerosis, congenital heart disease, and hypertension, and will also include symposia on genetic factors in arterioscler-

(Turn to page 30)

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osis and on the natural history of congenital heart disease.

Saturday, Oct. 24: The clinical program features lectures on auscultation of the heart, use of hyperbaric oxygen therapy in cardiovascular disease, and anatomy of the coronary arteries in health and disease. There will also be a symposium on coronary arteriography. Concurrent sessions include the Brown Memorial Lecture, "Studies in the Human Retinal Circulation."

On Saturday evening, 20 Cardiovascular Conferences will provide physicians with an opportunity for small group discussions of timely problems.

Sunday, Oct. 25: Highlighting the Clinical Sessions will be symposia on new developments in control of heart disease, and on interpretation of unknown electrocardiograms. Scientific Sessions include an all-day showing of cardiovascular films with introduction and commentary by the authors or other authorities on the subjects and sessions on cardiovascular surgery.

As in other years, scientific and industrial exhibits will be on display.

Registration forms, which include applications for hotel accommodations, are obtainable from local Heart Associations or the AHA national office, 44 East 23rd St., New York, N. Y. 10010.

R.I. Society Announces 1964 Essay Topic

The Trustees of America's oldest medical essay competition, the Caleb Fiske Prize Essay of the Rhode Island Medical Society, announce as the subject for this year's dissertation "Recent Advances in the Control of Respiratory Virus Diseases, Including the Exanthemata."

The essay must be typewritten, double spaced, and should not exceed 10,000 words. A cash prize of $500 is offered. Essays must be submitted by Dec. 11, 1964.

For complete information regarding the regulations write to the Secretary, Caleb Fiske Fund, Rhode Island Medical Society, 106 Francis St., Providence, R.I. 02903.

Volume V
Number 9
September 1964

JOURNAL of the Mississippi
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The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, $5 per annum; $1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

September 1964

Dear Doctor:

It's an open secret why the Senate Finance Committee quashed compulsory inclusion of physicians under Social Security by an astonishing 14-to-1. Testimony from medical organizations and other responsible sources was overwhelmingly against the "doctor force title," and even such liberals as Sens. Anderson (of King-Anderson renown), Douglas, Gore, McCarthy, Hartke, and Fullbright stood with physicians.

> MSMA's testimony against compulsory inclusion stressed unfairness and uselessness of proposal. Only Connecticut's Ribicoff, former HEW secretary, held out in his consistent role as medicine's implacable and unyielding foe.

American smokers may scare easily, but they forget just as quick, what with cigarette sales booming at new highs. Fag makers reported sales of 45 billion cigarettes in June, an increase of 8.5 per cent over 1963. As if Surgeon General's report hadn't been published, tobacco stocks boomed on Big Board and dividend promise may edge prices higher.

A new commercial dairy process can take fall-out fear out of milk for a surprisingly low cost. An Oak Ridge, Tenn., private company has developed a technique which can remove up to 95 per cent of all strontium 90 content from milk for about two-tenths of a cent per quart. U. S. Public Health Service has given firm contract for further research, but not for de-radiation: Object is water pollution control.

Marshall County Post No. 75 of The American Legion adopted strong resolution on use of VA hospitals by any other than veterans as defined by law. Action specifically names COFO workers, "professional agitators," and groups asking federal government to extend care services through VA facilities. Legionnaires say that care for these nonveteran groups is best provided on the local level.

Rabid bats - rare, but not unprecedented in medical literature - have turned up recently in three Mississippi counties. State Board of Health issued warnings after infected animals were discovered in Hinds, Montgomery, and Rankin counties. Two Rankin county children, exposed to bats, are hospitalized, receiving anti-rabies treatment.

Sincerely,

Rowland B. Kennedy
Executive Secretary

AMA Warns Public Of 'Slumber Mongers'

Chicago - The peddling of pills, powders, drinks, and devices designed to wring cash from the sleepless is a fast growing form of quackery, AMA warned recently. The "slumber mongers" offer generally worthless sleep aids, such as a package of 30 pills containing mostly aspirin and antihistamine for $2. A prescription drug which is effective costs about $1 for the same number of pills.

Insurance Institute Forecasts Hunting Mishaps

New York - The Health Insurance Institute, using data accumulations of previous years, says that 17 million hunters will spend 225 million days at the sport during the remainder of 1964 but tragically, 400 will die of gunshot wounds and six times as many will be injured in gun accidents. HII also cautions nimrods of falls, bites, burns, water, and travel hazards.

Hill-Burton Extension Has Mammoth Appropriation

Washington - The new Hill-Burton extension for five years carries the first authorization in program history for hospital modernization and renovation. Almost $1.4 billion won easy Congressional approval with $840 million for construction and modernization, $350 million for nursing homes and chronic care facilities, $100 million for diagnostic and treatment centers, $50 million for rehabilitation centers, and $7.5 million for voluntary areawide health facility planning, subject to states' putting up matching funds.

Chicago Water Fluoridation Is Upheld By Supreme Court

Chicago - Fluoridation of Chicago's limitless water supply has been upheld by the Illinois Supreme Court as a necessary public health measure. A taxpayer group, objecting to artificial fluoridation, sued for injunctive relief on basis that it was harmful and class legislation. Both trial court and appellate body denied plaintiff's claims, holding fluoridation to be beneficial. Citation is Schuringa v. City of Chicago, 198 N.E. 2d 326 (Ill., Mar. 18, 1964).

Low Calorie Cola Makers Strike Back At Sugar Industry

New York - Royal Crown, bottler of Diet-Rite Cola, top seller in the low-to-no calorie soft drink market, kicked off a campaign striking back at the sugar industry for pooh-poohing their product. First ad, carried in Wall Street Journal, was headlined "Guilty of upsetting the sugar cart" and future spreads will brand Diet-Cola as "unfair to organized sugar." A boon to the weight control, the low calorie colas may take as much as a third of the market in another year. Abbott is building a new multimillion dollar Sucaryl plant to supply bottling industry.

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
September, 1964, Vol. V, No. 9

ORIGINAL PAPERS

The Cloak of the False Healer

JOHN G. ARCHER, M.D.
Greenville, Mississippi

In setting the stage for the Congress on Health Quackery, Dr. Archer observes, "The medicine show of yesteryear really hasn't vanished from the American scene. It is no joke. It is a serious, urgent problem with deadly potential threatening our health and sapping our resources." He reviews the fight of scientific medicine against quackery and urges, "Let us work without ceasing toward the day when the last predator upon human misery has finally been assigned to the hottest fire in hell. . . . Only then will we be secure from those who would harm us in the cloak of the false healer."

THE MEDICINE SHOW of yesteryear really hasn't vanished from the American scene. It merely has a new, sophisticated form, a new shrewdness, and even a new merciless disregard for the value of human life. Throughout recorded history—and probably before—the charlatan, the quack, and the nostrum peddler have ranked high on the lists of those who practice the confidence game with one eye on the dollar and the other on the law. Even a few are within the law—however ill advised such law may be. But all are outside the limits of human decency.

The quack, be he licensed to ply his nefarious trade by misdirected statute or not, preys upon human misery. His dedication is to personal gain, and he possesses the morality of a rattlesnake. His greatest friends are ignorance, fear, desperation, anxiety, and suspicion.

He is instantly available—as close as your mailbox or the dingy, walk-up office over the corner store. He sometimes rings your doorbell, and he advertises for your attention. He comes in many shapes and sizes, calling himself by any title calculated to catch your fancy and engage your confidence. The sheriff may be just a step behind him, or he may have the badge of sanction and respectability of the state. But he's a quack, and to him, the sick person is just another prospective client, provided there's money to be made.

In 1847, the American Medical Association was founded to improve medical education and to seek the betterment of the public health. The organizers, who comprised the best physicians of their day, took time in this founding meeting to do a second highly important thing: They adopted the first version of the *Principles of Medical Ethics,* and it stands today as the best known formal system of morality in the world.

In 1856, the Mississippi State Medical Association was founded in the capital city of Jackson

1963-64 President of the Mississippi State Medical Association.

Read before the Congress on Health Quackery, 96th Annual Session, Mississippi State Medical Association, Jackson, May 13, 1964.

with similar objectives in mind. A century and a decade later, Mississippi medicine has the same basic concerns which have lain heavily upon nearly five generations of physicians. The association is concerned with the quality of health care, and it comes in only one grade—the best.

We are concerned that worthless nostrums are peddled from door to door in our cities and in the countryside. We are concerned that a fraudulent, discredited dogma is practiced in the shadow of this metropolitan area where a cultist claims he can cure disease with a punch in the spine.

NO DEFENSE NEEDED

Scientific medicine needs no defense or recommendation. The miracles of the victories over the infectious diseases, the virtual eradication of the killers of the past, the almost-won victory over poliomyelitis, and the encouraging promises of the future make us proud to be a part of medicine. Where a knife in the heart once meant only death, it can now also mean life for a child previously doomed to early death. Medicine is winning over the metabolic disorders, and the breakthrough in the nervous and mental diseases is in sight.

The great University of Mississippi School of Medicine, the respected State Board of Health, the fine system of hospitals, the capable ranks of highly trained physicians, and the corps of those skilled individuals in the allied professions give Mississippi every assurance that medicine will never be satisfied with its progress, however dramatic, however lifesaving, and however effective it may be.

Yet, the quack is with us, even in this enlightened era of science where the human lifespan has been lengthened by a generation in half a century.

It is for this purpose that the Mississippi State Medical Association made the decision to bring before the public these cold, hard facts on health quackery. Joining hands with MSMA are the American Medical Association and the United States Food and Drug Administration. And with their representatives comes also a distinguished physician from Texas who understands this vexing, tragic dilemma.

Many Americans simply can't recognize a health quack. While we are a people not easily impressed, we have also become so sophisticated that we expect the miracle as the routine. Perhaps we even have an outdated concept of health quackery and just how devastating it really is.

Some of us remember the medicine show. There was almost a carnival atmosphere when the gaily decorated, horse-drawn wagon clattered into town. A certain romance attached to the brass lanterns and the kerosene torches. Then there was the "professor" and the stoic Indian "chief," essential ingredients, to be sure, in the purveyal of the snake oil and herb elixir.

Many have vivid recollections of the excitement this unlikely assortment of humanity, paraphernalia, and nostrums brought to the crossroads, and almost nobody complained because the medicine didn't work. For the children, it was entertainment at its best, because the chief usually prefaced the professor's "lecture" with a few war whoops and a terrifying dance. For Aunt Martha, it meant another excursion into the treatment of her arthritis. No doubt, the boys at the saloon enjoyed the fabulous stories that the professor was able to recount from his equally fabulous travels.

Since scientific medicine in those days had little enough to offer, perhaps it was a *quid pro quo,* with a fair money's worth all around. But this pleasant nostalgia has no place in our thinking today. Indeed, it's this sort of pleasantry that can lead us to an untimely end.

ARTHRITIS 'CURES'

Eleven million arthritis sufferers in these United States spend an estimated $250 million a year for the flim-flam of worthless nostrums. They buy alfalfa pills, such as we see advertised in Jackson and in my hometown of Greenville.

About 10 years ago, the Food and Drug Administration went into federal court in Jackson, proceeding against a local woman who sold a product she called "Tri-Wonda," a worthless concoction priced at $10 a package. It consisted of certain acids and laxatives, and the patient might have easily obtained the same effect from eating half a lemon and taking a good dose of milk of magnesia—but that wouldn't have cured arthritis, either. We are proud to say that the Mississippi State Medical Association also entered that case on the side of the government as *amicus curiae.* And we won.

There are the food faddists, too. They say that the soils are depleted, that fertilizer poisons the land and the crops, that certain type of cooking utensils harm foods, and that processing depletes the nutritional value of what we eat.

This is so much hogwash. The fact is that Americans are so well fed that their principal problem is to keep from being too well nourished.

As a practicing internist, this is forcefully apparent to me.

There are the phony devices, the gadgets for which all sorts of false and deceptive claims are made. They fool the fat, purport to cure cancer, promise freedom from heart disease, and even say they'll keep you sane in this world of stress and shock. With us always are the exposé publications and ever-growing lists of books on the secrets of eternal health. Of course, some of the quack authors are so unfortunate as to die before being able to enjoy the royalties from their sucker-readers' purchases.

THE GREATEST HOAX

But what disturbs many physicians began in 1885 at Davenport, Iowa, when a grocer and fish merchant named D. D. Palmer decided that his body was charged with animal magnetism and that a man so endowed had no right to waste it on haddock and flounder. After 10 years of palming himself off as a magnetic healer, he claimed to have discovered chiropractic, perhaps the greatest hoax ever perpetrated upon the American people in the name of health care.

There is no shred of demonstrable scientific evidence to support and validate the dogma of this cult. The chiropractor claims that disease is caused by a pinched nerve in the spine and that sickness is thus mechanical in origin. Of course, if this fantastic premise were in the remotest sense valid, it would have been discovered long before an unlearned fish merchant espoused it. And it would have also been accepted by science, too.

We physicians can tell you about disease. Vertebrae are rarely dislocated. Moreover, those nerves issuing from the vertebral spaces are so minute and so well padded that direct pressure upon them by the vertebrae is, for all intent and purpose, practically impossible. And even if they were pinched, disease would not necessarily result. Paralysis, perhaps, but typhoid fever, no.

But it is a curious paradox that 47 states have conferred some sort of legal recognition upon this cult of chiropractic. Only Louisiana, Massachusetts, and Mississippi deny them the badge of sanction and legality that they so earnestly seek. Our enlightened state administrations, our conscientious legislators, and our people want no part of legalizing a cult and thereby erecting a double standard of health care in Mississippi. To do so would be to make a mockery of our school of medicine, of our hospitals, of our medical profession, and—most important of all—of the intelligence of Mississippians.

AN URGENT PROBLEM

The medicine show of yesteryear really hasn't vanished from the American scene. It is no joke. It is a serious, urgent problem with a deadly potential threatening our health and sapping our resources. It is a lethal confidence game where the gain is dollars from misery and the loss is life itself. We plead this case for the public health, in the public interest, for the good of those who need help the most—the sick.

Let us work without ceasing toward the day when the last predator upon human misery has finally been assigned to the hottest fire in hell, reserved for one whose goal in life is to deceive and defraud. Then—and only then—will we be secure from those who would harm us in the cloak of the false healer. ★★★

344 Arnold Ave.

FROM EAST BERLIN WITH LOVE

Now there's a drug angle in the ancient cloak and dagger profession. At an East Berlin "finishing school" for beautiful red spies, the girls are being taught how to use narcotics to elicit information from unsuspecting victims in the West. The headmistress is a former Russian countess turned communist, and the girls are chosen for beauty, social grace, and ability to attract Westerners.

—*Insider's Newsletter*

FDA's War on Quackery

EDWIN C. BOUDREAUX
New Orleans, Louisiana

Beginning with the metallic "tractors" patented by Dr. Elisha Perkins in 1796, the author traces the development of the electro-magnetic era of medical quackery. He notes that quackery is estimated to cost the American public a billion dollars a year including the consequences of unnecessary and worthless treatments and the misinformation utilized to promote such things. He reviews the legal authority under which the Food and Drug Administration conducts its war on quackery and discusses the development of the FDA. In conclusion he invites all physicians to join with the FDA in a "relentless battle of science and law against superstition and fraud."

Mr. Boudreaux

THE ORIGINAL FOOD AND DRUG ACT came into being in 1906. Only foods and drugs were considered at that time; devices were not even mentioned, let alone included.

In 1933 it became apparent that a completely new Food and Drug Act was needed. Five years later such a law was finally passed as the Federal Food, Drug and Cosmetic Act. Cosmetics and devices were now included for the first time. The importance of devices, however, was apparently considered minor, since it was not required that they be proved safe before marketing as were new drugs; nor was the designated name "devices" included in the title of the act as was "cosmetics." It would be impossible to compare the beautifying importance of milady's cosmetics with that of medical and surgical devices, but contact lenses, facial stimulators, and massagers, the multitude of ultraviolet tanning lights, and many other such enhancers are therapeutic devices under the terms of the federal law.

The definition of a device under this law, though rather brief, is broadly encompassing. It states that devices are instruments, apparatus, and contrivances, including their components, parts, and accessories, intended (1) for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals or (2) to affect the structure or any function of the body of man or other animals. Obviously, the entire instrument armamentarium of the medical practitioner is included thereunder.

The new drug amendments of the Federal Food, Drug and Cosmetic Act enacted in 1962 left devices in the same category they were in in 1938. Regulatory restrictions insofar as devices are concerned are confined only to the labeling of the device created by the manufacturer and/or distributor. The burden of proof, however, to disapprove any labeling contention continues to rest on the federal government. If nothing else, it is the awareness by perpetrators of fraudulent devices of this legal "loophole"—burden of proof—that encourages quack devices to be manufactured and flourish.

What may have been accepted medical practice one hundred or fifty years ago to a large extent may be quackery today. Science is now capable of distinguishing with considerable certainty the effective from the ineffective. Our laws, based upon medical knowledge, can determine between what is legal and what is illegal. The fact that quackery can be put to the test is the basic fact underlying this conference. Our mutual interest is how to expedite these determinations and to

Director, New Orleans District, Food and Drug Administration.

Read before the Congress on Health Quackery, 96th Annual Session, Mississippi State Medical Association, Jackson, May 13, 1964.

take effective action against quackery, both by law enforcement and by education of the public at large.

Quackery is not something that happened in the past. It is going on all the time. Old frauds reappear in new disguises and new ones are being invented. The tendency to depict quackery in the trappings of an old-time medicine man is long past. Instead, we may see a white-coated, professional-appearing person, who is probably a licensed practitioner in an ultramodern office who purports to have a machine or treatment that is so new and different that the medical profession is against it. He says they are afraid it will put them out of business.

There is no doubt that quackery is a major health problem. At the First National Congress on Quackery two years ago it was estimated that it cost the American public a billion dollars a year. This, of course, was an estimate. It includes the consequences of unnecessary and worthless treatments and products of every description and the misinformation utilized to promote such things. There are no statistics to tell the cost of quackery in money, injuries, and human life.

FDA PROVISIONS

The Federal Food, Drug and Cosmetic Act does not define quackery in specific terms, but it encompasses it under broad provisions which prohibit all claims in the labeling of foods, drugs, devices, and cosmetics that are false and misleading in any particular. There are three major kinds of health frauds which violate the law.

1. Quackery in promotion of so-called therapeutic devices.
2. Quackery in the marketing of food supplements and so-called health foods.
3. False claims for drugs and cosmetics.

Because FDA is convinced that quackery is widespread and that it causes harm to the public, it is putting forth a major effort to deal with the problem through enforcement and by education. It believes the successful control of quackery involves a vigorous and sustained enforcement program and a widespread informational and educational program.

There is not time today to discuss all forms of quackery which fall under the Federal Food, Drug and Cosmetic Act. Therefore, the remainder of this discussion will be limited to quackery involving so-called therapeutic devices.

In this talk, I will attempt to trace the development of the electro-magnetic era of medical quackery, which has flourished for more than a century and which had its beginnings in the theories of Dr. Elisha Perkins.

DR. ELISHA PERKINS

Dr. Elisha Perkins was one of the first to exploit the mysteries of magnetism and electricity to treat the sick. In 1796 he patented his metallic "tractors" consisting of two pointed rods about three inches long, made from different kinds of metal. By pulling them downward over the affected part, the disease was supposed to be yanked out. President Washington was one of his customers. Hundreds of educated people believed in the Perkins theory including doctors, ministers, and members of Congress.

Dr. Perkins' theories were widely disseminated both in this country and abroad. They still persist today. We see them in the magnetic belts, magnetic bracelets, and many types of complicated-looking but scientifically simple contraptions which continue to be promoted by misguided or dishonest persons for the treatment of diseases.

There is no scientific evidence to support the theories of Dr. Perkins and all devices based on his theories are considered worthless for any medical purpose. We are removing them from the market whenever and wherever they are encountered.

PATENT MEDICINE ERA

Following Dr. Perkins there were others who endeavored to capitalize on the magic of electricity and magnetism. But the 19th century was very much the era of the patent medicine, and it was this form of quackery which developed to its maximum of popularity. The advent of the telephone and the electric light provided a background for the promotion of gadgets like the "Electropathic Corset for Ladies"—a boon to delicate women and all who suffer from organic diseases, rheumatic affections, and weak back. Addison's Galvanic Electro Belta was promoted to the men —"for lost manhood there is nothing like electricity." At the end of the century, Dr. Hercules Sanche developed his Electropoise and Polizer to aid the "spontaneous cure of disease." His Oxy-

donor was a Polizer containing an added stick of carbon. For this improvement the price went up from $10 to $30.

DEAN OF CHARLATANS

In the early part of this century Dr. Albert Abrams of San Francisco, who has been described as the Dean of All Twentieth Century Charlatans originated his system of "Radionics" which was based on the pseudo-medical theory that electrons are the basic biological unit and all disease is a "disharmony of electronic oscillation." Dr. Abrams developed both diagnostic and treatment devices to adjust these oscillations. He operated his phony business under the sophisticated name of the "College of Electronic Medicine" before there was a Federal Law controlling devices. Through the College, Abrams was able to expand his profitable operations on a nationwide basis. And, just as Perkins had cashed in on popular interest in the new science of electricity, so Abrams cashed in on the popular interest in the new field of radio communications. He died in 1924 leaving an estate estimated at $2 million.

THE RADIOSCOPE

Following Abrams' death his clinic and other operations were taken over by Fred Hart and operated as the Electronic Medical Foundation. Mr. Hart, who has no scientific training, carried on Abrams' thriving business and placed hundreds of expensive diagnostic and treating machines in the offices of practitioners throughout the country where they are still being used. Here is how the business was conducted: The practitioner would mail a sample of blood on a piece of blotting paper to the clinic in San Francisco where it would be placed in a device called the "Radioscope" which was supposed to measure the "emanations" associated with different diseases given off by the dried blood. This device is a box containing dials, lights and wires, and a slot in which may be placed a specimen carrier of filter paper bearing dried blood of the patient. Metal plates connected with the box were held by a person who was designated the "reagent" and who was supposed to serve as a "detector" for the radiations allegedly emanating from the blood spot. The operator of the machine would stroke the abdomen of the "reagent" with a plastic wand. If the wand "stuck" to a particular location, that was supposed to be a manifestation of an "electronic reaction," and the operator allegedly could determine from this the identity, kind, location and significance of any disease present. Readings from this machine were sent back to the practitioner on a postcard, telling him the disease his patient was supposed to have and the type of treatment to be given by one of 13 different "treatment" machines the practitioner had previously purchased. These treatment machines were basically of two kinds:

(1) devices producing a weak magnetic field, and

(2) devices emitting short-wave radio frequencies.

Neither type of device has any value in the treatment of disease.

In 1958, the District Court in San Francisco entered an injunction which prohibited further distribution of 13 types of medical devices by Fred Hart and his Electronic Medical Foundation. A comprehensive investigation of the machines by the Food and Drug Administration showed them to be complete fakes; they could not distinguish between colored water and blood, or the blood of a living man from that of a dead man. Blood submitted from an amputee resulted in a report of arthritic involvement in the right foot and ankle which the man had lost several years before. Blood from a rooster resulted in a diagnosis of sinus infection and dental caries. Fred Hart stipulated to the injunction but later violated it for which he was fined $500. The Electronic Medical Foundation has been dissolved, and Mr. Hart has moved his operation to Monrovia, California, where he now directs the operation of the National Health Federation.

ILLEGAL DEVICES

Although distribution of devices by the Electronic Medical Foundation has stopped, our job is not complete because hundreds of these worthless devices are still being used. They are illegal. Practitioners using them should promptly discontinue their use and either destroy them or dispose of them for non-medical purposes. We cannot overlook the continued swindling of people who are led to believe that they are receiving competent medical care when they are treated with one of these devices. Their names are:

Oscilloclast

Oscillotron

Regular Push Button Shortwave Oscilloclast

Sweep Oscillotron

Sinusoidal Four-in-One Shortwave Oscillotron

Galvanic Five-in-One Shortwave Oscillotron

Depolaray

Depolaray Chair

Depolarary Junior

New Depolaray Junior

Depolatron

Depolatron Chair

Electropad

THE MICRO-DYNAMETER

The devices distributed by Perkins, Abrams, and Hart spawned many others which are equally worthless and equally inimical to the public health. Dinshah Ghadiali and his worthless Spectrochrome as late as 1946 had fleeced millions from the public. The most direct descendant of the Perkins "tractors" today is the Micro-Dynameter. This device is a galvanometer mounted in an impressive cabinet. On its face is a scale or meter to measure in milliamperes the flow of current, together with a number of dials which can be set as numbered or letter positions. The current which flows, and is measured by the scale or meter, is generated by closing the circuit between two dissimilar metal "probes." The circuit is closed by placing the "probes" at different points on the human body.

In actual operation, the patient holds in his hand a combination electrode (or "probe") consisting of a silver pole and a zinc pole. A lighted needle then moves across the scale on the face of the device. The reading obtained is the "Potential Energy" or "Vital Reserve" of the body.

A second reading, obtained by adjusting the knobs on the face of the cabinet, is the "Metabolic Index," and supposedly measures the "exchange rate of cellular waste and nutriment" in the body. The final reading, obtained with the same knob settings as the "Metabolic Index," but after the patient takes a deep breath, is the "Oxygenation Index."

These readings are recorded on a card, and by drawing lines between the points indicated two other values are obtained—the "Dynamic Energy" and the "Health Index." These are claimed to show the general state of health of the body.

With an electrode of antimony alloy placed on the tongue and an iron electrode on the arm, the patient's "Acid/Alkaline Balance" is determined. In other tests, one electrode is held in the patient's hand and the other moved over various areas of the body. High readings are claimed to indicate areas of pathology.

In general, the claims for the machine are that it can discover changes in living tissue by measuring electrical current produced by such tissue changes.

Carefully controlled test showed that the amount of current flowing between the electrodes of the device was due to the amount of perspiration on the skin and was not dependent on the health or diseased condition of the body.

Last year FDA rounded up nearly 1200 Micro-Dynameters, most of which were being used by licensed practitioners. They sold for $875 each, a total of over one million dollars. The cost to patients, at $5 to $10 per treatment, could easily be $25 to $50 million. But this would only be part of the real cost. As the Court of Appeals put it, "A device whose labeling claims it to be an aid in diagnosing as many diseases as this one, when in fact it is not, is unsafe for use no matter who uses it."

THE NEUROLINOMETER

The Toftness Clinic at Cumberland, Wis. has been distributing several models of a device manufactured by Electronic Instrument, Inc., of Tiffin, Ohio. It too is based on Abrams' theories of the diagnosis or "analysis" of disease. The Neurolinometer or "black-box" as it is frequently referred to is supposed to determine the presence or degree of "nerve interference" by means of an electrode placed on the spinal column while the operator moves his fingers over a "detector plate." Minute nerve impulses are claimed to be transmitted to the detector plate. The operator of the device rubs his fingers over the plate and is supposed to detect a "stickiness" when it passes over any bad spot along the spine. The trouble spots are then treated by various methods. Electronic Instrument, Inc., distributed several other similar devices. The patient may feel a tingling sensation from the current with some of the machines.

In April 1962, a Federal Court Order entered in Toledo prohibited further distribution of seven devices by Electronic Instrument, Inc. and its officers. The names of these devices are:

Neurolinometer

Electron-O-Ray Model 51

Quto-Electronic Instrument

Radioclast Model 40

Radioclast Model P

Radioclast Treating Unit

Electron-O-Ray Model 46

Sick patients continue to be treated with Toftness devices in possession of health practitioners throughout the country. We are in the process of rounding up these devices. Fifty-four Neurolinometers have been seized and 21 voluntarily destroyed.

ROBY DEVICES

Lester L. Roby, Sr., of Tiffin, Ohio, has been in the health device business for over 25 years. He has been distributing several Abrams-type devices to practitioners, charging as much as $1200 each. In general, they consist of bulky cabinets containing electrical parts that produce low voltage, low frequency currents. They have no therapeutic value.

Last June the Federal Court in Toledo barred by injunction order the further distribution of four Roby devices. The International Electronic Research Society, Inc., was the distributor for the "scientific" reports explaining in pseudo-medical terminology how to use the devices. The impressive-looking machines were known as:

Electronic Magnetic Model G

Radioclast Model 40

Auto-Electronic Radioclast Model 20, Series 800

Electronic Analysis Instrument Model F

THE ENDOCARDIOGRAPH

So the list grows, and it becomes clearer and clearer that here is a malignancy in the field of medicine. The number of devices, organizations and practitioners participating in this hoax in the name of science is too big to ignore and their threat to the public health too great to tolerate.

Additional devices claiming to wear the mantle of science are:

The Endocardiograph

The Hubbard E-Meter

The Drown Radio Therapeutic Instrument

The Endocardiograph is distributed by the Endocardiograph Company, Inc., Milwaukee, Wis., one of the enterprises of Royal Lee. Lee is a nonpracticing dentist who distributes dietary products to health practitioners for the treatment of all diseases, is a director of the National Health Federation, and is probably the largest publisher of unreliable and false nutritional information in the world. He invented and distributed the Endocardiograph device, an electrical amplifying recording stethoscope used by practitioners to diagnose diseases, following which one of Lee's vitamin preparations is used for treatment. According to the literature describing the use of the device the practitioner is able to "detect and analyze" hypertrophy of the heart, muscular fatigue of heart muscles, and diseases due to vitamin and other diet deficiencies which are alleged to include practically all diseases.

In January 1962, Royal Lee, Vitamin Products Company, Lee Foundation for Nutritional Research, Endocardiograph Company, Inc., and Leeland, Inc., all enterprises of Royal Lee, were enjoined from shipping misbranded drug products in interstate commerce. But this action did not cover the Endocardiographs that are now being used. On Oct. 24, 1963, three of these devices were seized in Baltimore in possession of Vitamin Products Co. of Maryland, one of Royal Lee's distributors. The devices were being used to diagnose serious diseases for which the distributor was selling Lee's preparations for treatment. The government charged that the labeling of the device contains statements which falsely represent the article to be effective to detect and diagnose vitamin and other diet deficiencies, hypertension caused by excessive amounts of cholesterol, hypertrophy, and numerous other disease conditions.

In January 1963 more than 100 Hubbard E-Meters, a skin galvanometer similar to the Micro-Dynameter, were seized along with three tons of associated literature which misbranded the device. The seized devices were in possession of the Academy of Scientology and related organizations. We charged that the literature falsely represented the devices as effective for the diagnosis, prevention, treatment, detection and elimination of the causes of all mental and nervous disorders such as neuroses, psychoses, schizophrenia, and all psychosomatic ailments. Psychosomatic ailments were represented to include most of the physical ailments of man such as arthritis, cancer, stomach

ulcers, radiation burns from atomic bombs, and polio. It was further claimed that the device is effective in improving the intelligence quotient, to measure the basal metabolism, and "change of state of man."

THE DROWN RADIO

The Drown Radio Therapeutic Instrument is a "radionic" type device developed upon the Abrams Electronic Reactions theory by Ruth B. Drown of Los Angeles, who also operated as Drown Laboratories. It was represented to be effective in forming "health cells," making blood counts and urinalysis, and for both diagnosing and treating practically all diseases, including cancer, as well as for loss of speech and loss of memory.

Dr. Drown contended that a drop of the patient's blood placed on a blotter forms crystals and these, like the crystals in early radio receiving sets, activate the device to the proper wave length whereby an absolute diagnosis could be made. Once the diagnosis was secured, even though the patient was thousands of miles away, she claimed the device would broadcast the necessary "healing waves" back to the patient and effect a cure.

One of the devices was seized in 1949 because of claims for use in diagnosing and treating a large number of diseases. Dr. Drown was prosecuted, found guilty and fined $1,000. As far as can be determined, she discontinued interstate business but continued to operate a treatment center in Hollywood. This center was investigated by the California State Bureau of Food and Drug Inspection and on Oct. 9, 1963, the Los Angeles County Grand Jury returned an indictment against Dr. Drown, her daughter and four others, charging grand theft and attempted grand theft in diagnosing and treating patients for non-existent diseases with worthless electric devices. Also, 40 of the devices were seized by the state.

This action by California is only one of many that this state has taken over the years against fake medical devices. We are most encouraged by this vigorous enforcement at the state level.

THE PUBLIC'S LOSS

The medical "con man" who is a big-time operator can bilk the public of millions. In December 1963 the Federal Court at Indianapolis sentenced a man (Roy DeWelles) who is estimated to have taken in $3,000,000 with a machine to give enemas. It was supposed to "de-toxify the colon" and cure everything. He got 10 years in prison for mail fraud.

A more unusual case was one recently called to our attention by a member of Congress. The person involved was a victim of a nervous ailment. During one year he paid $28,000 for treatments with a machine represented as being capable of performing psychoanalysis and treatment of mental conditions, as well as other diseases. For similar treatments a college student paid $2,600 out of his educational fund to improve his capabilities as a student.

We urge all practitioners who are using any of these various devices for the diagnosis and treatment of diseases to discontinue such use and dispose of them for nonmedical purposes. They are worthless for the diagnosis or treatment of any diseases and are illegal if used for this purpose. Such action will not only protect innocent sick people but will save the government the expense of locating and seizing these devices.

NO SECRET CURE-ALL

We know, and most people know, that medical science is not a mockery. In this scientific age it is possible to determine whether a drug or a machine or a method will do what it is supposed to do. The time is past when the promoter and user of a worthless device can hide behind a cloak of secrecy and mystery, for secrecy and mystery are incompatible with science.

Science has stripped away the mystery of quack devices and left bare the truth which is that there are no secret cure-all machines that are capable of diagnosing or treating different kinds of diseases simply by turning dials, and applying electrical contacts to the body. Such devices are fakes! Their promoters are eccentric individuals and pitchmen who would turn medical science into a side show.

This conference is a demonstration that scientific medicine and law enforcement stand together against quackery in all of its forms and all of its disguises.

A RELENTLESS BATTLE

The Federal Food, Drug and Cosmetic Act does not empower the Government to regulate the practice of medicine. This is left to the states through their medical practice laws and regulations. But the law does empower the Government to regulate the distribution of devices used for

medical purposes, and we know of no state that licenses anybody to diagnose and treat disease with a worthless device.

Device quackery has no legitimate claim to immunity. It is the most despicable form of quackery for it uses science to advance its cause. It takes advantage of the people's confidence in the great discoveries in science and their belief in the incredible.

The progress of science is irreversible. We have made clear our determination to deal with device quackery. We invite all of you to join with us in a relentless battle of science and law against superstition and fraud. ★★★

423 Canal St.

ONE UP

The Edinburgh physician and his minister had been golfing partners for 20 years, and the former always won. After a particularly discouraging round from the clergyman's viewpoint one day, the physician said, "Don't worry, Reverend, someday you'll have the pleasure of burying me."

"Aye, doctor," responded the discouraged pastor, "but it will still be your hole."

The AMA Campaign Against Quackery in Medicine

OLIVER FIELD, LL.B.
Chicago, Illinois

THE AMERICAN MEDICAL ASSOCIATION has had, as one of its functions, a continuing effort to contain and minimize the practice of medical quackery, cultism and faddism, wherever they might appear.

The first meeting of what is now the American Medical Association was held in Philadelphia in 1847, at which time a resolution was adopted, under the heading of a code of medical ethics, wherein it was stated that there was great need for increased activity against the medical quack.

Since about 1907 there has been what may be regarded as a more formal program, which involved the rather incidental formation of the Department of Investigation, then called the Propaganda Department. This was a regular feature of the *Journal of the American Medical Association* and was a drumfire of expository articles on "patent medicine" promotion, the promoters themselves, the purveyors of worthless remedies for such things as arthritis, cancer, diabetes, tuberculosis, obesity, "weak men," and a few more of the items which plague mankind, such as baldness, flat-chestedness, and "cures" for the many dermatological manifestations which mar the attractiveness of prospective users.

The late Dr. Arthur J. Cramp was responsible for the establishment of the department. He had been a school teacher, who lost an only child after calling upon an inept Doctor of Medicine to treat her. This caused him to give up his teaching and enter what is now Marquette University School of Medicine at Milwaukee. Not long after graduating, he came to work for the AMA as an editorial assistant in 1906. Soon his literary efforts were exclusively in the realm of exposing quackery, faddism, cultism, and all other aspects of pseudo-medicine.

The function of the department to expose, ridicule, and define the quack continues today, but

AMA's Department of Investigation was organized around 1907 under the late Dr. Arthur J. Cramp, a former school teacher who had lost an only child after calling upon an inept doctor of medicine to treat her. The function of the department to expose, ridicule, and define the quack continues today. The author, who is the current director of the Department of Investigation, discusses quackery —past and present including Krebiozen, the "cancer cure" and the "Drown Radio Therapeutic Instrument." In conclusion, he notes that efforts are now underway to "vaccinate" impressionable high school and college students against the medical quacks. "We are hopeful," he writes, "that means can be established and utilized so that all segments of the population can be alerted and the younger generation made quack-proof."

Mr. Field

Director, Department of Investigation, American Medical Association.

Read before the Congress on Health Quackery, 96th Annual Session, Mississippi State Medical Association, Jackson, May 13, 1964.

under considerably different conditions. No longer are there "cures" for diabetes, which must be exposed, unless one is concerned with representations of such cultists as chiropractors that they can use chiropractic methods to avoid the use of the insulin needle. Rather, today, there are the "cancer cures," the purveyors of nostrums and methods and systems for the treatment of arthritis and rheumatism ("Tri-Wonda" being a Mississippi example). The food faddists reap a harvest of dollars from hopeful Americans on the pretense that vitamin and mineral supplements are means whereby disease may be abated, cured, or, better still, avoided by the regular use of such products.

THE CASE OF MR. HOXSEY

In the field of cancer quackery, there has been a transition, thanks to the efforts of some of the government agencies having regulatory authority over foods, drugs, devices, and cosmetics. In particular, the Food and Drug Administration has been successful in its efforts to stop the depredations of Mr. Hoxsey, who originated in Illinois and who left there after being prosecuted for unauthorized practice of medicine. He went to Iowa, where he is under permanent injunction against practicing medicine, to Michigan, to West Virginia, to Pennsylvania, Indiana, New Jersey, and finally Texas, where he flourished from 1936 until 1960, when finally he was enjoined from the practice of medicine and from the distribution of anything known as the Hoxsey treatment for cancer.

When Mr. Hoxsey started out, he had a remedy which he claimed was inherited from his father and his grandfather. Somewhere along the line he picked up a sarsaparilla-type mixture which was described in federal court in Dallas by the nurse who made it for seven years as a mixture of cascara sagrada and potassium iodide, four ounces each of which were added to a gallon of tap water. The retail price of such a mixture, together with a few pills, was $800 (enough for two cancer patients). At one time Mr. Hoxsey boasted that he had over 10,000 "patients."

It was revealed in federal court that in a period of shortly more than one year, Mr. Hoxsey's income exceeded $1,000,000. Yet it is known that Hoxsey, far from being a doctor of medicine, although he held a license to practice as a naturopath in Texas, received only an eighth-grade education.

There is no question that this man possessed great native ability in the matter of promotion. He utilized religious publications, politicians (including a United States senator), a book entitled "You Don't Have to Die," numerous tracts, pamphlets, reprints, and other means of communication wherein praise was heaped upon himself and opprobrium upon the medical profession for its failure to recognize the worth of his products in the treatment of cancer.

GLYOXYLIDE

Another example of great success in pulling the public's leg on the subject of quackery, during which time the medical profession was accused of unfair tactics and of refusal to recognize a cure, was "Glyoxylide," the product promoted first by Dr. William F. Koch of Detroit and later by the Christian Medical Research League of the same address, after Dr. Koch left the country. In 1919 he announced to the world that he had "a real specific for cancer." This he called his "Synthetic Antitoxin." It turned out to be a mixture of something in the dilution of one to a trillion aqueous, which was sold for $25 for 2 cc. to the ampule to quacks who would use it on hopeful cancer patients. In turn, these medical rascals charged their patients anywhere from $100 to $500 a shot.

From 1919 until 1953 there were many inquiries on the subject of the Koch cancer treatment, also by its later name "Glyoxylide." After the Federal Trade Commission was successful in obliging Dr. Koch and his laboratories to cease advertising that his products (of which there were three, all in high dilution) had any value in any disease category, the interest lagged, but a source still persists. Every now and then there is an inquiry about a nurse up in Canada who ships her product into the United States under the Koch labels. For a while a naturopath in Texas was advertising in a religious magazine that he had available the Koch treatment. Even Dr. Koch, from his haven in Brazil, excoriated this impostor for selling a counterfeit of his fraud.

KREBIOZEN

Today the immediate problem that presents itself to medicine in the way of cancer quackery is "Krebiozen." Through clever promotional activities, particularly through Senator Paul Douglas of Illinois and a respected name in medicine, Dr. Andrew C. Ivy, this mysterious substance has

been the subject of a most interesting campaign beginning in 1951, when it was introduced, ostensibly to the medical profession, but also to the public, as something having great promise. In a report published in the *Journal of the American Medical Association* for Oct. 27, 1951, by the Committee on Research of the AMA Council on Pharmacy and Chemistry (now the Council on Drugs), it was stated that in 100 cases there was no showing that the product had demonstrated merit in the treatment of malignant disease. The principal medical proponent, Dr. Ivy, has claimed repeatedly that this report was superficial in toto and falsified in part. He has had the benefit of books, pamphlets, and other means of communication to present to the public a picture of alleged medical persecution and refusal to be fair about the matter of the merit of this nostrum. It is labeled to be one of whatever the product of the stimulation of the reticulo-endothelial system of the horse is, to 100,000 parts of oil.

The promotion of the product through the various channels has, of course, resulted in a good deal of pressure on doctors to use it, particularly from patients and the families of such patients who are seeking a miracle, particularly when doctors tell the family that nothing more, either medically or surgically, can be done.

There are, of course, other examples of means used to fool the public, not only in the diseases mentioned, but in a wide variety of other products, particularly gadgets having alleged merit either in the treatment of specific categories of disease or as panaceas for all the ills of mankind.

THE DROWN INSTRUMENT

One of the examples we use to describe a point that the intelligentsia are more easily gulled than others is the "Drown Radio Therapeutic Instrument." By way of explanation, the Drown Instrument is nothing more than a simple Galvani circuit, housed in a black leatherette-covered box, complete with a micro-ammeter which responds when the electodes, which are dissimilar metals, are placed against the body of the patient.

Mrs. Drown, a Hollywood chiropractor, who also ran a school for chiropractors, had worked for Commonwealth Edison out there. Undoubtedly she had heard of Dr. Abrams and his success with his black box, which he called the "Oscilloclast." Like Abrams, Mrs. Drown utilized the technique of pretending to make diagnoses on the basis of examination of a specimen of blood on a piece of blotting paper.

Mrs. Drown also had talents along dramatic lines, because she was a successful performer on the lecture platform. She had a good many adherents in and around Chicago, including wives of trustees of the University of Chicago, who were instrumental in having a committee of the medical school faculty observe Mrs. Drown demonstrate her technique in diagnosis and a few other things. She failed miserably, and her society-lady adherents knew it, but they were unable to accept the fact that she was a fraud.

In another instance, a graduate engineer, who had been fooled into utilizing the Drown Instrument in the home treatment of his wife's breast cancer, was embarrassed when his own machine was opened. He later testified in federal court when Mrs. Drown was prosecuted under the Federal Food, Drug, and Cosmetic Act for misbranding. At the same trial, the president of the Los Angeles County school board testified on behalf of Mrs. Drown.

These things do not fade away. In October 1963 it was announced in Los Angeles newspapers that Mrs. Drown had been arrested for grand theft. She had persisted, apparently, in the exploitation of her machines in California after the channels of interstate commerce became too hazardous.

QUACKERY CONGRESSES

The Department of Investigation collaborates with state and federal enforcement agencies when matters which may involve violation of laws designed to protect the public come to its attention. Appropriate agencies are contacted, usually with an offer of assistance so far as the facilities of the department are concerned.

To bring the problem to the attention of the public, the AMA and the Food and Drug Administration have collaborated now on two National Congresses on Medical Quackery, the first held in Washington in October 1961, the second in the same city in October 1963. The first meeting was designed to alert the public that there is still quackery in medicine, despite the great gains made by solid scientific research, and that it is a billion-dollar-a-year problem. In fact, more money is wasted by the American public on quack products and systems and the ministrations of doctors false to their oath than is spent in a year on medical education in this country.

The second meeting called for a study of means whereby people could be educated to become im-

mune against the blandishments of the pretenders to medical skill. It is hoped that means can be developed whereby the impressionable youngsters who are students in high schools and colleges will be vaccinated, so to speak, against the medical quacks. Educators already are seeking ways and means whereby such a program can be implemented into a practical reality. We are hopeful that means can be established and utilized so that all segments of the population can be alerted and the younger generation made quack-proof. If this can be accomplished within the foreseeable future, it will certainly be a follow-up on the deliberations of the medical representatives who met in Philadelphia in 1847 to form what is now organized medicine, of which the Mississippi State Medical Association is such a distinguished member. ★★★

535 North Dearborn St.

EXTRAMARITAL EXPEDITER

A New York City physician has developed an effective technique for disarming overly protective secretaries to important persons he telephones. In answer to the vexing stall, "And what is your call to Mr. So-and-so in reference to?" the crafty doctor simply says: "I want to find out what he's been doing with my wife."

The Keys to Quackery

WILLIAM H. GORDON, M.D.
Lubbock, Texas

"Alice: 'One can't believe impossible things.' . . . White Queen: 'I daresay you haven't had much practice. . . . When I was your age . . . I believed as many as six impossible things before breakfast.' "

LEWIS CARROLL—
THROUGH THE LOOKING GLASS

"ONCE UPON A TIME . . ." No fairy story could possibly have a happy ending unless it started with "Once upon a time." With this magic phrase one brushes aside the curtain of reality and opens wide the portal leading into the bright, glittering world of make-believe where wishes come true, hope is rewarded and faith is a necessity.

How then could one better start a story about medical quackery than to say, "Once upon a time . . ."? Without hope, faith, and desperate longing, the entire false world of the quack would collapse. It is a sad commentary that they do work for him, and villain that he is, he tragically exploits faith, mocks the wishful, and holds out hope when he knows there is no hope. Through the employment of infinite cunning, he lures his victim to his domain of quackdom, but each unfortunate dupe must open the door with his own key. One can never lose sight of this fact, the victim opened the door himself. He may be deceived, lied to, and cajoled; he may have the key placed in his hand, but he, and he alone, uses it. One may say that without the victim's full consent, he can never enter the land of the sorcerer.

Accepting the premise that, "All the world is a stage and all the men and women merely players . . ." would enable four victims of make-believe to play their respective roles and demonstrate their key and the manner in which it betrays them.

SCENE I

The setting of the first scene is the front porch of an unkempt little house on the edge of an equally unkempt little town some place in the heartland of America. When one opens the rickety picket gate and walks down the rock and flag bordered path to the porch, he observes our first player, a gnome-like old man hunched forward in his chair, clad in blue overalls and blue shirt, clean but faded from countless washings. Upon coming closer, one sees his wrinkled, old face, wreathed in a toothless grin, and eyes bright like two headlights shining through a mist. In his hand, much as a dying martyr might hold a holy relic, he clutches a pencil-shaped glass object containing powder.

Quackery's sine qua non, *says the author, is a belief in a "once upon a time land," a place where dreams really do come true. He describes four victims of make-believe and discusses these keys to the land of the sorcerer: faith, desire to escape, desperation, impatience, fear, superstition, gullibility, hypochondria, and responsiveness. He outlines the careers of such notorious quacks as Elisha Perkins, Albert Abrams, Dr. Dinshah Ghadiali, and Dr. William Reich, and considers the place of the placebo effect in quackery. The only way to eliminate quackery, writes the author, is to eliminate the quacks. The victim, he concludes, will be with us always.*

Dr. Gordon

Read before the Congress on Health Quackery, 96th Annual Session, Mississippi State Medical Association, Jackson, May 13, 1964.

Here one is seeing magic at work. The old man has just completed the purchase of a "magic spike" from a representative of the Vrilium Products Company of Chicago—for $306.

What does it matter that the purchase had taken the greater part of his painstakingly hoarded "buryin' money"? After all, didn't the young feller say that the rays from this "magic spike" would "fix him up," and make him ten—no, twenty years younger? "A man who has twenty more years to go, practically guaranteed, needs no buryin' money."

His key was faith, faith based on an impossibility.

SCENE II

The setting of our second scene is the kitchen of a modest but well kept house located in Suburbia, U.S.A. Our player is a woman, whose age might be lumped into that dreary period that stretches interminably between the mid-thirties and forties. An acquaintance might sense something unusual about her this morning. She might note a certain lithesomeness in her movement, an erectness to her carriage, and a spring to her step, all attributes which had been missing for a long, long time. Why? the acquaintance might wonder. Why the sudden transformation?

Midway in her chores at the sink, she stops, and with the back of a sudsy hand brushes back a strand of mousy hair, while unseeing eyes stare out of the kitchen window. She is reliving those wonderful, unforgettable moments which have given to her life a new purpose.

When he first came to the door, the young man asked for her—not just anybody, he asked for her. He said that he had found from numerous inquiries that she was one of the most influential members of the church and of the community, so naturally he had come to her for help. (She had always thought she would enjoy being a community leader, and now she was one. Imagine!) He said that his aim in life was to bring happiness to people, but that he had found so much pain and suffering everywhere in the world that he had almost despaired. Recently he had discovered a means of accomplishing his mission. He was going to remove peoples' ills, and make them well and happy again. Illness, he explained, was simply a matter of improper eating. "People are sick," he said, "because they don't eat right, they eat junk." "All they need to feel good again is Bio-Minerole, the new scientific food supplement." The young man said that he wasn't interested in just selling; he wanted to feel he was helping suffering humanity, but he needed her help. Would she be a pioneer and guide people back onto the road to health? Of course, if she were a pioneer, she would get a discount on her monthly supply of Bio-Minerole.

Imagine! Helping people back to health, like Florence Nightingale, almost.

Her key was a desire to escape; escape from boredom and from the feeling of abysmal futility.

SCENE III

The third scene takes place in a second floor back bedroom in a third or fourth rate hotel. Our player, a man no longer young but refusing to accept this obvious fact, has devoted his life exclusively to horses and women. Things have been going rather badly of late. If one of them had been a bit better than the other, horses would get the nod. He had cashed in on a lucky pick in the third at Narragansett, but who could remember when he had cashed in on a dame.

While these sobering thoughts were flashing through his mind, he was standing in front of a cracked mirror attached to a knobless dresser. He touched some grey showing through at the temples, removed frayed threads from his cuffs, and casually brushed the toe of one shoe on the back of the other leg. (The backs of both trouser legs gave proof that this was not an isolated act.)

After competing these tonsorial niceties, our player thoughtfully thumbed through a men's magazine to something that last night had caught his eye. He read it again.

"Men! Why Grow Old? Regain Your Youth. Be Confident. Never be Embarrassed Again. Youth is Yours, if You Act Now.
Send $20 to Youth Regained, Inc., For Our Introductory Offer. You Will Agree With Others, That 'This Is The Best Money You Ever Spent.' "

Into an addressed envelope went two well handled tens and a coupon with a return address. As he sealed the flap he wondered how much longer he'd be there. He needed this money for rent, but, what the hell, time was passing, but quickly.

His key was desperation, cold, soul-chilling desperation.

SCENE IV

Our fourth and last scene takes place in a girl's bedroom, one that could be found in many homes throughout this land. Our star is a girl in her early teens. Invading her privacy, which had been insured by securely locked doors and tightly drawn

curtains, one encounters a scene, which if it were not filled with such bright dreams and destined to end with bitter tears of chagrin and disappointment, would be highly ludicrous.

Our player, unattractively clad only in a pair of panties draped over winged hip bones, has knobby knees, spindly legs and a thin little body with all the curves and contours of a match. She is standing in front of her dresser, looking not in the mirror, but down at two little nubbins on her chest that for all the world have the appearance of two fried eggs. With the magic lotion that arrived only today she is carefully massaging these tiny protuberances, and as she does, her glance falls upon the printed label, "Bust-O-Fill," price $3.95. What a fitting title! What a reasonable price!

As the anointing and massaging continue she glances down, but her mind's eye does not see the monstrous little buttons. It sees only the dreamed symmetry that could properly fill a sweater. What else but magic?

Her key was impatience.

KEYS

These imagined scenes depicting faith, frustration, desperation and impatience are but four drawn from the countless possibilities enacted this morning, were yesterday, and will be tomorrow. People seeking the quick, easy, magic way of the quack travel many paths to be relieved of their money, their self respect and possibly their lives. They may react differently to the advertisements carried in otherwise reputable publications, but however they are motivated, thousands with problems of hemorrhoids, overweight, hernia, cancer, heart disease, diabetes, arthritis, skin disorders and many other physical and/or mental disorders are attracted and do fall under the influence of the charlatans. This can be a trap from which some will escape only when they are broke, and others only when they are dead.

Any superficial appraisal of this situation where suckers jockey for position to be cheated is apt to be disgusting, or even sickening. Yet, if one should analyze the problem more thoroughly, he might experience other emotions, even pity.

It behooves all who are interested in this widespread and deeply rooted cancer of society to do more than tabulate the dollars lost, or enumerate instances of fraud. It is important that more effective statutes be available, more laws which offer fewer possibilities for evasion and escape, and it is imperative that appropriations be sufficient, or at least more realistic. Perhaps greater latitude should be granted the investigators who, without fanfare, laboriously, patiently, and with great ingenuity, trap these enemies of mankind. To repeat, these and other measures are all significant, but it is imperative that an appraisal be made of the basic psychological motives which make quackery possible.

In addition to these attributes already mentioned one should add fear, superstition, gullibility, hypochondria, and responsiveness. One must also grant the fact that these represent but a few of the psychological keys utilized by the unscrupulous dispensers of unhappiness. In discussing them separately it is apparent that multiple impulses may be at work to produce what appears to be a single vector of fear or superstition, or any of the other mentioned keys.

FEAR

Of man's many motivations, fear may be numbered among the most compelling. Fear of death, of pain, of one's security, fear for the safety of loved ones may, at times, produce strange actions and reactions among people who have heretofore been considered rather ordinary run-of-the-mill folks. Fear may bring out unsuspected strength and fortitude. It may bring out previously undemonstrated unselfishness and nobility, or it may unveil a well camouflaged streak of immaturity or even of cowardice.

When told they have a cancer, some individuals panic. Like horses caught in a burning barn, their actions become unreasonable and unpredictable. Such an individual cannot bear the thought of long palliative treatment. He cannot face the possibility of death; he wants to be told that no surgery or radiation is indicated, and most of all, he needs to hear someone say that it is curable. Such people are untouched by reason. All rational thought is abandoned. They willingly accept and hide behind the lies told them by cancer quacks. They are willing not only to accept but to buy any "cure for any price." It matters not one whit that the whole performance appears ridiculous to the family or to friends, or would have appeared so to themselves prior to this great psychic shock.

SUPERSTITION

Superstition is closely linked to fear. It is an irrational, abject attitude of mind towards nature or the supernatural. It implies a belief in magic or sorcery. In all likelihood superstition has held a place in the treatment of disease since primitive man's first organized society appeared on this earth. Death and disease were viewed as supernatural phenomena; since they were not under-

stood it follows naturally they were to be feared. Charms and amulets were employed for protection, and for treatment, the ancient medicine men bored holes in his patient's head to allow imprisoned evil spirits to escape. He speeded them on their way by chanting incantations and employed various spectacular rituals to see that they remained away. None of these measures were understood by the patient, but he willingly turned to him who said he did. The sufferer viewed illness as supernatural in origin, and logically concluded that in supernatural or magic measures lay his only hope.

People living in the United States today profess a high level of civilization, yet at times this culture appears as a thin veneer spread over eons of primitive beliefs. How else can one explain the action of an otherwise reasonably intelligent person who, in times of panic, turns his back on the gifts of modern science and embraces the promises held out by the modern counterpart of the primitive medical men. He hears the song of the Lorelei and hastens to his sorrow, and often to his destruction.

Fear and panic, therefore, constitute two of the charlatan's chief benefactors. They open the door for many.

GULLIBILITY

There is an abiding belief among "con men" that the easiest "mark" is one who believes himself to be "hep." They demonstrate the soundness of this premise countless times each day. Most people living in the United States believe themselves to be "hep." They suffer from a common malady which might be termed "IWK" (information without knowledge). An article about vitamins is read and immediately the reader becomes an expert in the field of nutrition. They thereby contribute $500,000,000 each year to the door-to-door food supplement salesman. They read about minerals and fall prey to the salesman's supplying ocean water. They hear of uranium's curative power and allow themselves to be made fools of, for a price, by sitting with their feet in furrows or reclining in some damp cave without any possible chance of being benefited.

Such experts glean their knowledge from the Sunday supplements, national weekly and monthly magazines, and promotional literature. They become perfect targets for the quacks. Vaguely remembered words, whose meanings to them are even more vague, when used by a smooth talking door-to-door salesman, or an orator conducting a free health lecture immediately captivate their interest. They pit their own meager knowledge against the "experts," and before realizing it have been hooked. They have been "conned" into buying something they don't need, probably don't want, but must use if they are to save face. Vitamins, mineral supplements, natural food products, cancer-free aluminum ware, youth restoring herbs and so forth are sold to millions of people who go out of their way to be gypped. Had they not been so "smart," they would have escaped. They cannot face the possibility of admitting ignorance. They avoid asking their own physician or some other authoritative person concerning the true worth of the product in question. IWK results in their contributing money, which many can ill afford to lose, to perpetuate multi-million dollar rackets that have become a national disgrace.

For generations charlatans have made use of this attribute of gullibility as it pertains to scientific advancement. Terms such as magnetism, vibration, rays, atoms, trace minerals, organic foods and cosmic radiation are adopted by the pitchmen in their sales talks and adapted to their particular cause. For some these terms constitute their chief sales pitch. The accomplishments and methods employed by four of the more successful pseudo-scientists will illustrate this point.

Elisha Perkins lived some 250 years ago and cured all types of disease by employing two small pieces of magnetic metal—that is, they were alleged to be magnetic and metal. His reputation grew as the result of old Elisha's contention that he could "pull disease from the body by magnetic attraction." It has been reported that the Father of our Country, George Washington, bought and used a pair of these magnetic tractors. For what disease he was being treated, or the results obtained, are facts denied us by historians. Nonetheless, this would lead one to believe that Elisha Perkins was popular at the time. The magic apparently was possessed only by the discoverer, for when Elisha died, his son took the marvelous system to England and embarked upon a venture that ended as a miserable failure. Young Perkins' downfall was heralded by Dr. Hygarth's use of a pocket knife. He proved the magnetic tractors to be nothing more than two pieces of painted wood by the simple experiment of cutting one in two with his pocket knife, in front of an audience.

Albert Abrams. By the end of the second decade of this century, Albert Abrams, M.D., of San Francisco, had proved himself a failure. He had been singularly unsuccessful in combating disease, even though he had attempted to rid the

patient of his ills by tapping him along the spine with a small rubber hammer.

At or about the end of World War I, Dr. Abrams found his fortune at a low ebb. Fortunately for him, and for a multitude of his unscrupulous acolytes and hangers-on, he conceived a method of diagnosis based upon the use of two cheap, resistant boxes and spark coils removed from an old Ford car. He wired these props together in an illogical fashion, but after having done so, he announced to the world that with this "magic detector" he was capable of tuning in on the vibrations emanating from a drop of blood and could tell exactly the cause of his patient's illness. Being an ingenious manipulator, it was easy for him to devise a method of treatment which worked equally well. With the new apparatus he "tuned disease out of the body." For $100 per person, Dr. Abrams consented to allow his unfortunate clientele to sit in his treatment rooms, holding onto wires attached to this machine, out of which was coming absolutely nothing.

Dr. Dinshah Ghadiali modestly referred to himself as "The Edison of India," and it is reported that his M.D. degree, fresh from a diploma mill, cost him $133.30. His specialty which covered the full spectrum of human ills was dominated by a machine of his own invention called the "Spectro-chrome." With it, he alleged, he could cure anything. He attempted to do so. The apparatus consisted of a lamp which permitted light to shine through panels of multicolored glass. This light allegedly produced strange results. For example, light coming through the scarlet panel stimulated sexual desire, and through a purple panel dampened the victim's ardor. The effectiveness of this form of therapy was observed by Dr. Ghadiali to be enhanced when the subject slept with his head pointed north, and when he gave up the use of eggs, fish, meat, alcohol, and tobacco.

Dr. William Reich, originally a prominent psychoanalyst, junked his limited method of treatment in favor of an all-encompassing one. With the latter, he treated cancer, sexual impotence, practically all other types of human ills. He employed "cosmic energy" which he called "Orgone." With this agent, allegedly, he was able to perform miracles.

His treatment consisted of having the subject sit in a tub-sized wooden box which had been lined with zinc. This immediately put the patient in contact with "Orgone," and a cure was sure to follow.

These frauds, by using and prostituting respectable scientific terms were successful in carrying to the people their nefarious hoaxes, which resulted in the victimization of untold numbers of subjects. Perhaps as a result of the success of these four leaders, contemporary charlatans are trying to accomplish equal success by employing names such as Cosmic Ozone Light Generator, Depolaray, Oscillotron, Oscilloclast, Oxydonor, Sanoscope, Onometer, Estemeter, Pathoclast, Hemovitameter, to bedazzle the gullible. The modes of action are ridiculous past the point of believing. A dumbbell-shaped cotton ball contained apparatus which allegedly "expanded the hydrogen atoms in one's being." It seems that in illness one's hydrogen atoms have a habit of "contracting," thereby producing illness. The magic spike previously alluded to, produced by the Vrilium Products Company, sells for $306, and is proposed as a cure for every ill. The Electreat, a mechanical heart, utilizing flashlight cells, according to its promoter is effective against twenty-four illnesses, but is said to be helpful to those who "are sick all over."

The fraternity of charlatans are dropping the designation of "Doctor," which after all, is a rather common-place one, in favor of the more impressive titles. Titles such as naturopath, naprapath, sanipractor (which fits well with the other kind of ...practor), electrotherapist and physiotherapist. (One should hasten to explain that while there are reputable electrotherapists and physiotherapists, just as there are reputable doctors, certain members of this underworld medical cult have seen fit to borrow the designation.)

These are bogus names of bogus people, worthless gadgets and impossible treatments, yet when taken collectively, they constitute a racket that reaps an incalculable harvest annually of money, lives and disillusionment. This tragic fact is a fitting testimonial to the senseless gullibility of an appreciable sector of those now living in Space Age America.

HYPOCHONDRIA

It is hard to fathom the reasons why otherwise healthy individuals live in a constant state of morbid anxiety, concerned solely with the state of their own health. Feelings of guilt, and a morbid fear of death are partial answers, or an unconscious desire to cover or distract from an inadequacy, real or imagined, might be another reason for over-concern with health. Suffice it to say there are many such unfortunate people. They haunt doctors' offices, but when no physical illness worthy of their concern is found, they hunt for

someone who will find it. These poor souls who need psychiatric attention generally refuse it. They take refuge in "the camp of the Philistines," the quacks. Here they do find their disease. The smart operator will let the patient announce his particular phobia, and then by employing occult powers or by using new "scientific apparatus," finds it. The condition is always treatable but the treatment is generally quite protracted and expensive. The patient is made to believe he is improving, but slowly, and the hoax is perpetrated until the victim's money is gone, or until the disease is changed to a new one equally hazardous to life and limb, but equally curable, when given sufficient time and money. A wily practitioner of make-believe may make a career of a well-heeled sufferer. He may need to spread himself no further. Leeches attach themselves and suck dry individuals who, with proper psychiatric guidance, might have led useful and certainly happier lives.

There are less profound hypochondriacs whose particular need is satisfied by taking patent medicine and by testing every household and folk remedy they hear of. They do this on the outside chance they might already have an unrecognized illness, and they want to be prepared. This fact proves beyond question the accuracy of Sir William Osler's observation, "The desire to take medicine is one feature which distinguishes man, the animal, from his fellow creatures."

RESPONSIVENESS

Are such persons as those described ever benefited? Does the swallowing of noxious mixtures or the drinking of glasses of alfalfa tea, or the use of vinegar, honey and water make him feel better? One must answer in all honesty that if no illness of note is present, he may believe that he feels better. This brings us to the baffling and yet little understood subject of medical placebo.

PLACEBO

One definition of a placebo would have it, "A medicine given more to please than to benefit the patient." The benefit derived from placebo therapy being psychological, the patient feels better without any pharmacological justification.

The chief benefit derived from empiric drugging and from many home or granny remedies so dear to the hearts of nostalgic Americans is the placebo effect. The old family doctor of past days made frequent use of the bread pills. All experienced physicians recognize the fact that some patients respond favorably for a while to most medicines. The patient assumes that "Now that the doctor has been here and has given me medicine, I will get better." He expects medicine to make him feel better, so he does.

While placebo effect has been recognized for a long period, it has been only within the past few years that studies have been made attempting to evaluate it. Dr. Henry K. Beecher from Massachusetts General Hospital has reported the results of studies carried out by his own group, as well as having summarized the results of others. It would appear that in the treatment of subjective symptoms—symptoms of angina pectoris, headache, nausea, mood changes, anxiety, tension, the common cold and phenomena relating to cough, a single dose of a placebo is effective in 35 per cent of instances. There was found to be a significant correlation between the number of times the dose was repeated and the per cent of response to it. As stated, 35 per cent responded to the first dose of a placebo treatment, but when repeated, fewer and fewer obtained relief. It was found, however, that 14 per cent of the people in one study were consistent reactors, while 31 per cent were consistent nonreactors.

These and other investigations seeking to properly evaluate the placebo effect of treatment have supplied information that allows for the following summary:

1. Placebo therapy influences subjective complaint. People feel better even though the drug is inert.
2. It can be considered effective only in the cerebral cortex, i.e., any effect that is realized is in the mind and not on any disease process.
3. The attitude of the one who prescribes the medicine has a profound influence on the patient's response. When the prescriber is an enthusiast, far better results are obtained than when he expresses skepticism as to the probable benefit.
4. The degree to which the physician is able to induce in a patient a "state of arousal or readiness for a favorable response, the more potent the medication he gives will be."
5. There is evidence that placebos have increasing effectiveness with increased stress.
6. Among certain people who respond readily to suggestion, evaluation of the effectiveness of drugs in the relief of subjective symptoms becomes difficult.

The quack healers have made use of this responsiveness with enthusiasm on their part, with the patient under stress he can convince him that he feels better. The tragedy underlying this practice is the danger of stressing subjective symp-

toms without diagnosing or treating the underlying cause. Often when the placebo response has faded the patient's condition has progressed beyond the point of no return. One should not make the mistake of believing that only the ignorant react to suggestion. As Dr. Osler stated, "In all matters relating to disease, credulity remains a permanent fact uninfluenced by civilization or education."

It would appear that the elimination of quackery from our society will be accomplished only when the charlatans are removed. It is unrealistic to expect that the public will reject their advances. The keys of hope, fear, longing and desperation influence human action more profoundly than do reason, education or social mores. The hope of accomplishing the impossible remains. Magic continues to be felt by a whole race of humans who knew and responded to its pull long before they called themselves civilized, and will continue to do so despite their thin veneer. The door opens easily when the keys fit the lock. ★★★

1907 Avenue Q

MR. MISERABLE PRESIDENT

Quotes from former Presidents of the United States suggest that the White House is a "splendid misery" rather than the highest prize of attainment. Pertinent for the 1964 election year:

Thomas Jefferson: "The presidency is a splendid misery."

Abraham Lincoln: "I wish I had never been born."

James Garfield: "What is there in this place that a man should ever want to get into it?"

Warren Harding: "I knew that this job was too much for me."

But President Franklin Pierce summed it up for all time: "After the White House, what is there to do but drink?"

Radiologic Seminar XXIX: Mammography

DAN REIKES, M.D.
Hattiesburg, Mississippi

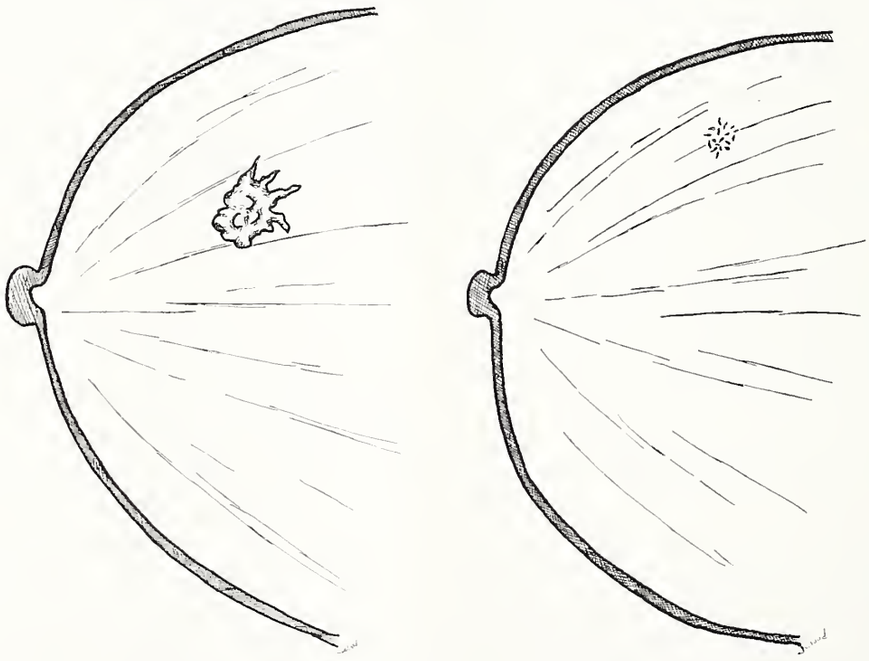
SINCE THE INTRODUCTION of radiography as a diagnostic tool in medicine, attempts at x-raying the breast have been made with varying degrees of success. During the last 10 to 15 years, rapid strides have been made toward improving the quality of this technique. Low voltage techniques and careful analysis of the anatomy by Dr. Jacob Gershon-Cohen and his associates at Albert Einstein Hospital in Philadelphia, and the use of industrial film proposed by Dr. Robert Egan were major advances in mammography.

The radiographic technique requires fine grain industrial film and modification of existing machines so that voltages in the range of 25 KV can be obtained. It is also necessary to center the x-ray tube carefully over the area to be studied and limit the x-ray beam to reduce useless scatter. A film is made in the cranio-caudad plane with the patient sitting upright. Lateral oblique views are made as well as a view of the axillary area. The latter includes the base of the breast which may harbor a lesion not seen on other views. Bilateral films are made for comparison. Since the breast is a truncated organ, exposures must be made for the tissues deep against the chest wall and for the superficial tissues about the nipple. Rather than produce two radiographic exposures, two films of different speeds in the same cardboard pack met our requirements.

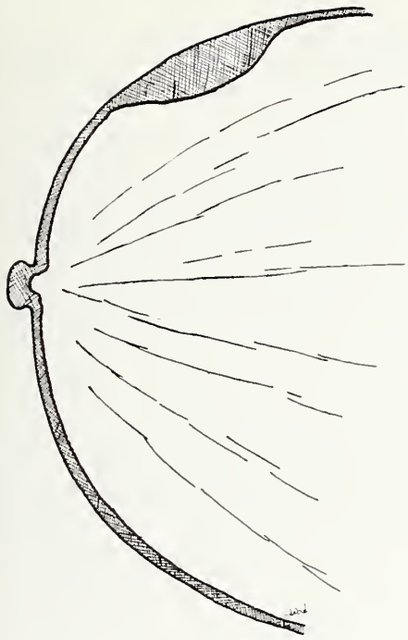
The diagnostic findings are divided into two groups: (1) the direct and reasonably pathog-

Sponsored by the Mississippi Radiological Society.

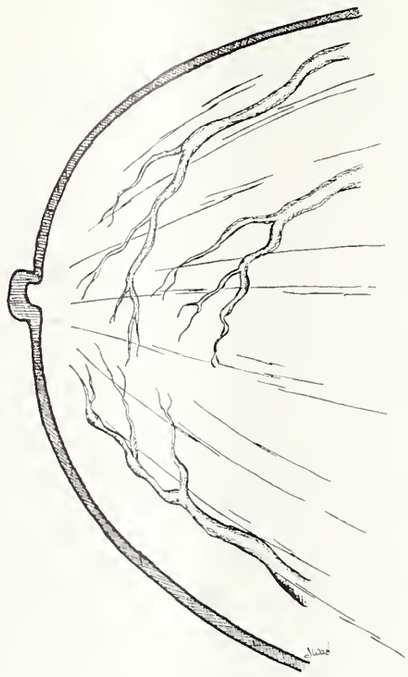
PRIMARY SIGNS OF MALIGNANCY



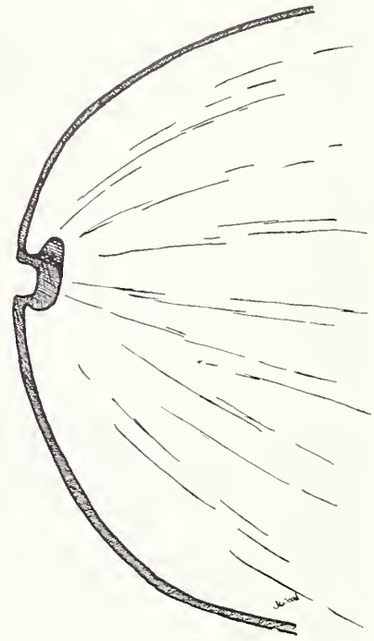
Dominant Mass *Minute Calcification*



Localized Skin Thickening



Enlarged Veins



Retracted or Deformed Nipple

nomonic of carcinoma and (2) the indirect, which are highly suspicious of carcinoma.

PRIMARY SIGNS OF MALIGNANCY

Dominant mass. This is an area of increased density standing out sharply from surrounding breast stroma. It has irregular infiltrating margins with tentacles extending out into the normal breast stroma often crossing the normal markings. Occasionally, the mass appears well circumscribed, but with careful observation, at least one margin will show blurring or characteristic invasion of the lesion into normal stroma.

Calcifications. Minute calcifications are often felt to be an evidence of early malignancy. This is particularly true when accompanied by any surrounding increased density of tissue.

SECONDARY SIGNS OF MALIGNANCY

Thickened skin. This is a uniquely valuable and reliable sign. In the case of localized thickening, it may reflect cancer below the area of thickening. This change may not be palpable or grossly visible on physical examination, but is readily seen on x-ray. Diffuse thickening, although of no value in localizing the lesion, may also be of value in diagnosing underlying malignancy.

Increased vascularity. Enlarged veins or increased blood supply in one breast or leading to one area of the breast are suspicious signs. Carcinoma often is the cause of an increased blood supply.

Nipple deformity. Marked deformity of the nipple with dense tissue about the sub-areola area is a warning sign.

We have currently performed 275 cases of mammography in two hospitals and a private clinic. Our rate of missed diagnoses is approximately 2 per cent when limited to subsequently diagnosed cancers. Mammography does not circumvent biopsy. However, it is felt to have a place with routine chest x-rays and lab procedures as a screening device.

SUMMARY

Mammography is felt to be a practical procedure when employed by trained physicians. The procedure is reliable and relatively simple. Diagnostic accuracy is quite good and as the procedure becomes more widely accepted earlier diagnosis of carcinoma of the breasts may improve the cure rate in this disease. ★★★

415 South 28th Ave.

REFERENCES

1. Gershon-Cohen, J., and Ingleby, H.: Carcinoma of the Breast: Roentgenographic Technic and Diagnostic Criteria, Radiology 60:68-76 (Jan.) 1953.

Clinicopathological Conference LVI

Conducted by the Department of Pathology
Greenwood Leflore Hospital
Greenwood, Mississippi

THIS 3-YEAR-OLD white female was admitted to the Greenwood Leflore Hospital on Aug. 20, 1961. According to the mother's history, the child was well until the day of admission. On the evening preceding admission (Aug. 19, 1961), she ate a hamburger with the rest of the family at a picnic, then went home to bed.

On the morning of Aug. 20, she awakened and informed her mother that her throat hurt. The mother gave the child an aspirin and an antibiotic which she had on hand, the nature of which is not known. Later in the morning, the child was sitting on the toilet when she suddenly developed a convulsive seizure and fell. The child was immediately brought to the hospital where she was met by a doctor. At this time, she seemed to be resting comfortably. Upon physical examination, no significant findings were observed, and her throat was not red.

She later developed a convulsion, and a series of convulsions ensued. She was given Nembutal by suppository and was given phenobarbital by injection and placed on Achromycin. The patient had no evidence of fever upon admission. When convulsive seizures continued, she was given magnesium sulphate by enema, and the convulsions appeared to abate. Past history showed "pneumonia" of one year ago but was otherwise noncontributory.

LABORATORY DATA

Laboratory findings revealed a spinal fluid which was clear and colorless. No white blood cells were seen upon spinal fluid examination. Sugar was 23 mg. per cent (normal 50-80), and protein was 39 mg. per cent (normal 20-40). No organisms were observed, and there was no evidence of growth following culturing of the spinal fluid. The blood CO_2 was 46 vol. per cent or 20.9 mEq/L (normal 20-28 mEq/L). The white blood count was 19,500 per cu. mm., hemoglobin was 12.4 gm., and the hematocrit 39 per cent. Differential was 84 segmented neutrophils, 2 stabs, 10 lymphocytes, and 4 monocytes. The child remained apathetic following her last convulsion, and at approximately 11:00 p.m., she ceased breathing. Permission for autopsy was obtained.

DIFFERENTIAL DISCUSSION

Dr. Daniel Trigg: "Today, we have a pediatric case, and Dr. Bernet has kindly consented to give a differential discussion on this case."

In CPC LVI Dr. Carl P. Bernet, Jr., discusses the case of a 3-year-old white female who died approximately 12 hours after the onset of a sore throat and convulsions. Dr. Daniel Trigg presents the autopsy report.

Dr. Carl P. Bernet, Jr.: "Basically, this is a distressing picture that we see on the average of once a year in children, usually a little bit younger than 3 years old. This particular case involves a 3-year-old child who got up relatively well the morning of admission and who was well at the time she went to bed the night before. We are told that the child had a hamburger with the rest of the family the preceding evening at a picnic and went to bed. When she awoke on the following day, she told her mother that her throat hurt. This was the first sign of any illness at all. We are not told whether any of the rest of the family became ill or had any gastrointestinal disease following this picnic, but we assume they did not.

"The mother, at this time, gave the child an aspirin and an antibiotic which she kept at home. (This is a bad practice to start with, since a number of diseases can be masked by it. In this case, however, this has little to do with it.) Later in the morning, the child was sitting on the toilet when she suddenly developed a convulsive seizure and

fell. She was brought to the hospital and the protocol notes that at this time the throat was not red and the physical examination was normal. We assume that there was nothing in the child's lungs, the neck was not stiff, nor were there any abnormal neurological findings. She had a series of convulsions following this, was sedated, given Achromycin, and roughly 10-12 hours after admission, the child expired. According to the past history, the patient had pneumonia a year ago.

"Roughly, we have a child, 3 years old, who suddenly complains of a sore throat and following this, she had a convulsion, normal physical examination, and in roughly 12 hours, expired. There is no mention of fever. Here we have a case of a young child who had a sudden illness with few physical findings, whose course was progressively downhill, and in less than 24 hours after onset, was dead.

"In the laboratory, the spinal fluid was clear and colorless (and there are some things lacking here), and we are told there were no white blood cells, but nothing about red blood cells is mentioned. This could have been a hemorrhagic type of phenomenon, although that is quite unlikely. Pressure would be possibly indicative of some type of encephalitis or something in that nature, with normal cells. The sugar is 23 mg., which is interesting because it was a low spinal fluid sugar, normal being 50-80. This may relate to the low sugar intake, but it certainly makes you suspicious of an organism being present in the spinal fluid utilizing the sugar that was there. The protein was normal. The report says 'no organisms were observed,' and there was no growth of organisms following culture of the spinal fluid. Again, we can go back to the fact that the child had Achromycin or some antibiotic prior to her admission, and it is well known that any type of antibiotic given prior to spinal fluid culture makes the culturing of the organisms in the spinal fluid most difficult. Again, there were no white blood cells in the spinal fluid; so, I think we can safely assume that this child did not have meningitis. I think we can go further and assume that there were no red blood cells there to indicate a hemorrhagic type of incident. I'll stick my neck out and say there probably was no evidence of encephalitis even without cells, so this we cannot completely rule out.

"Blood CO_2 was 46 vols. per cent, which is not low enough for this child to have been a diabetic. The white blood count was 19,500; it had a definite shift to the left of 86 per cent polys. The white blood count in children is usually one of the most unreliable things you get your hands on. You see children that should have a high white blood count that don't, and frequently you see a child following a convulsive seizure that will have a high white count, that if repeated the following day, with no therapy, will be back to normal. But, nevertheless, this is indicative of some type of bacterial infection taking place. I think that is about all we can say from this blood count.

"At approximately 11 p.m. the child ceased breathing, and an autopsy was taken. So, from what we know here, we can say that the child had a sudden onset, followed by a mild sore throat in which there were no physical findings present. Regarding sore throats, there are a lot of children with sore throats and about the only bacteria that makes a throat red is a streptococcus. Pneumococcus, staphylococcus, and influenza organisms in the throat will not make the throat reddish in appearance. So if the child had a sore throat, and the throat was not red, we can say that the child did not have a streptococcal infection and that's about all. It does not rule out, particularly in this case, the pneumococcus, the influenza, or even the meningococcal organisms which are believed to have a portal of entry through the throat. So we had a child with a mild sore throat and convulsions, followed by death in approximately 12 hours.

DISCUSSER'S CONCLUSIONS

"Now to go into the differential diagnosis, I thought I'd just mention a few things, then maybe something specific. I think that we can say here that we have a child who had convulsions, exhaustion, and death. She had little volume response to whatever infection she had. This could have been a cardiac disease, something like an aortic stenosis where there are few physical findings, which was followed quickly by death. I doubt it, as this child had been relatively healthy for three years although this does occur.

"I think we can eliminate metabolic disease, central nervous system, and trauma. I think most likely this child had some type of infectious disease. Whether it be of the central nervous system or elsewhere is hard to say. I think we can exclude the central nervous system. I do not think this child had a meningitis or an encephalitis because of the laboratory tests. Whether she had a meningococcemia, we have no blood culture to say. There were no petechia, so I think this diagnosis is quite unlikely. This is one of the diseases

in this type of case, though, that can be treated. The only thing suggestive here would be the low central nervous system sugar. I think this probably represents an infection elsewhere, and statistically, by far, the most common infection is

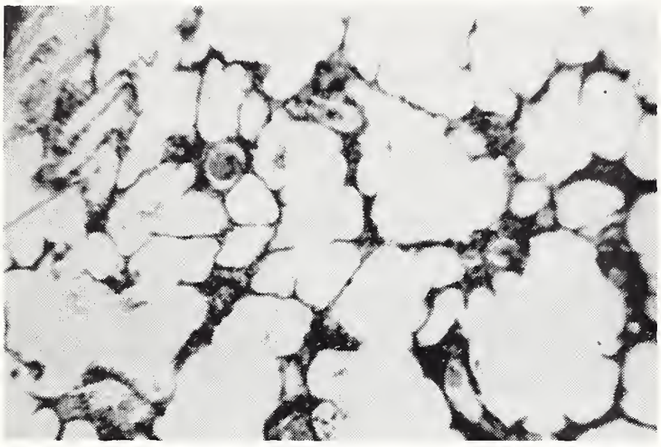


Figure 1.

pneumonia. At least two children out of three with this clinical picture are shown to have had bronchial pneumonia at autopsy.

"The organism in this type of case, when it can be identified, is certainly not the organism that we find in the usual types of pneumonia. Once in a while, a pneumonococcus is found, an influenza organism is found, but, most of the time, no or-

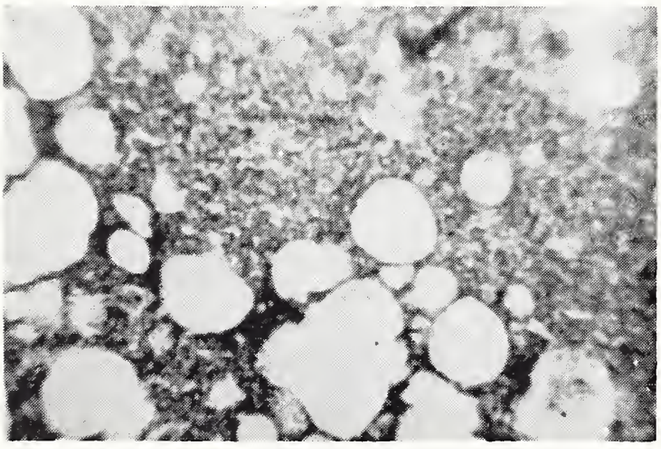


Figure 2.

ganism is found and the amount of pathology that is found in the lung at autopsy is hardly enough to explain the fact that the child is dead. We used to say these children died of enlarged thymus when they died suddenly, and physicians began applying radiation to the thymus and then it was found that the patients got carcinoma of the thyroid, so this treatment became unpopular. But this diagnosis, the big thymus gland, was, for a while, blamed for sudden death. Then, the pendulum swung in two directions. I'm afraid this might be where it is now. On one hand, we began to say, 'Well, this is really pneumonia because you can find something in the lungs.' We also began to say this is an adrenal insufficiency and this is seen not just in the children but in adults. When we really start looking at the adrenal and saying what is really an adrenal insufficiency, I wonder if we really aren't just a little bit advanced over the people who were talking about the thymus disease. So, I'll stick my neck out and say the pathologist didn't really find much at autopsy, that he found some changes in the lungs, but I

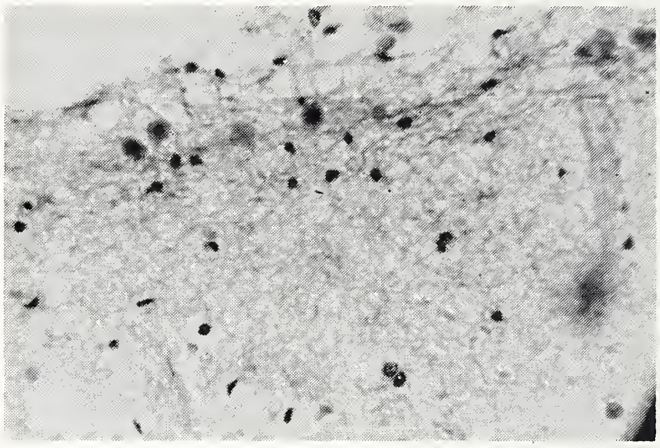


Figure 3.

doubt if he was able to find an organism. The brain may be a little bit foggy and swollen grossly, but I doubt if he found very much there."

AUTOPSY REPORT

Dr. Trigg: "Dr. Bernet summarized well what was found. He emphasized two areas of frequent involvement in these cases. One is the *lungs* and the other is edema and congestion of the *brain,* which is what we found. In this particular case there were fairly conclusive findings in the lungs, which I think, were a little more than the usual; although, more often, as Dr. Bernet said, lung findings are minimal. Figure 1 is from a lung field with increased alveolar wall cellularity but essentially clear alveolar spaces. In other regions there was very extensive *interstitial pneumonia* replacing almost all of the lung tissue (Figure 2). I might point out, this is more or less focal, and the entire lung was not this way. The brain evidences edema, some elevation of the pia (Figure 3), and the presence of macrophages." ★★★

Book Reviews

The Electrocardiogram and Chest X-ray in Diseases of the Heart. By Arthur M. Master, M.D., Consultant Cardiologist, Mt. Sinai Hospital, New York City, Richard P. Lasser, M.D., Assistant Attending Physician for Cardiology, Mt. Sinai Hospital, New York City, and Isadore Rosenfeld, M.D., Assistant Attending Physician for Cardiology, Cornell University Medical College, New York, and Ephraim Donoso, M.D., Assistant Attending Physician for Cardiology, Mt. Sinai Hospital, New York City. 565 pages with 376 illustrations. Philadelphia: Lea & Febiger, 1963. $21.00.

Dr. Master is internationally known in cardiology circles for his work in this field. He and his co-authors have written an outstanding book on electrocardiographic and chest x-ray findings in diseases of the heart. The book is divided into 12 parts. The first part deals with the normal heart. There is presented a very thorough discussion of normal x-ray and electrocardiographic findings in the normal heart. Included in the discussions of the normal heart are a section on angiocardiography and a section on vectorcardiography. The discussion is illustrated with a large group of pictures of x-rays and of electrocardiograms.

Part two of the book considers cardiac chamber enlargement. There is a good discussion of x-ray and electrocardiographic findings that are produced by various chamber enlargements.

Part three deals with rheumatic heart disease. There is a thorough discussion of the findings as presented, both in acute rheumatic fever, and in chronic rheumatic heart disease. Again, in this section, the authors have illustrated the findings profusely with pictures of x-rays and of electrocardiograms. There are also several case reports, which add to interest in studying these findings.

Part four of the book presents hypertensive cardiovascular disease, and the variety of findings in this problem. Ischemic heart disease in all of its aspects, including myocardial infarction is presented in part five. The heart in pulmonary disease, and in chest deformities is discussed in part six. Part seven covers diseases of the pericardium. Part eight discusses luetic heart disease. Part nine presents the findings as produced in thyroid disease. Part ten is a discussion of primary myocardial disease. Part eleven deals with tumors of the heart. Part twelve is a rather lengthy and detailed discussion of congenital heart disease.

This book thoroughly covers chest x-ray and electrocardiography findings in all types of heart disease, as well as a discussion of the normal. The material presented gives a good picture of findings in all of these various and sundry conditions. It is easily readable. Many details are presented here, and compiled together in one book, that it would ordinarily take many hours of searching in the medical literature to find. The presentation of case material and illustrations, along with the discussions of the various findings, adds greatly to the interest in reading the book, and helps immeasurably in understanding some of the finer points. I consider this to be a book which should be useful to novice and expert alike. It should be useful to the student, who is just beginning to learn his cardiology in medical school. I feel that it would also be a very useful reference source for anyone who is interested in cardiology in his practice of medicine. Very few books are available which would give one under one cover the quality and quantity of illustrations of both x-ray and electrocardiograms that are found in this book. The selection is very excellent covering all of the field, including the normal and a wide variety of disease states. I feel that this is the high type of book that one would expect from Dr. Master and his associates.

S. H. McDonnieal, Jr., M.D.

The Thyroid and Its Diseases. Third edition. By James H. Means, M.D., Jackson Professor of Medicine, Emeritus, Harvard Medical School; Leslie J. DeGroot, M.D., Associate in Medicine, Harvard Medical School, and John B. Stanbury, M.D., Associate Clinical Professor of Medicine, Harvard Medical School. 618 pages with illustrations. New York: McGraw-Hill Book Company, Inc., 1963. $15.95.

Drawing upon their vast experience and observations gained from the world-renowned Thyroid Clinic of the Massachusetts General Hospital, these authors have produced this third revision of their classic volume first published in 1937. The

text represents a collaborative work of the three authors, and although its coverage of the subject is termed "selective" and not encyclopedic in scope, it would appear to this reviewer to be fairly comprehensive. According to the authors no attempt was made to completely abstract the literature, but since much of the material presented represents personal observations and experience gained from years of study and clinic participation the book is more easily read and understood, and it serves as a valuable supplement to current knowledge of the subject.

Appreciating the need for understanding normal thyroid function before launching into diseases of the gland, the authors have presented a brief but adequate consideration of the anatomical, physiological, embryological, hormonal and metabolic aspects of the thyroid. This is followed by two pertinent chapters devoted to the relationship of the gland to internal and external environment. A most welcome chapter on diagnostic techniques covers all current knowledge of the subject. The remainder of the work presents the various diseases of the thyroid as well as developmental abnormalities of the gland. The judicious use of case summaries from clinic experience to illustrate certain aspects of thyroid disease is a unique feature. Another helpful feature is a summary of pertinent material covered at the end of each chapter.

The final chapter is a special one by Harvard Professor of Surgery Oliver Cope, M.D., in which he presents current observations of the surgeon's approach to disease of the thyroid.

This valuable book in its third revision represents a continuing chronicle of the work of many people in a famous clinic group and is considered a "must" for clinicians and students interested in thyroid disease.

EUGENE M. MURPHEY, III, M.D.

Books Received

JOURNAL MSMA has received the following books for review. Selections will be made for more extensive reviews in the interest of the readers and as space permits. Further information on the books listed will be furnished on request. Physicians are urged to submit reviews of additional books which, in their opinion, merit comment.

X-Ray Technology. By Charles A. Jacobi, B.Sc., R.T., assistant professor, medical x-ray technology and radiation health and safety officer, Radioactive By-Product Installations, Oregon Technical Institute, Klamath Falls, Oregon, and Don Q. Paris, R.T., chairman medical x-ray technology, Oregon Technical Institute, Klamath Falls, Oregon. 452 pages with 306 figures. St. Louis: C. V. Mosby Company, 1964. $11.50.

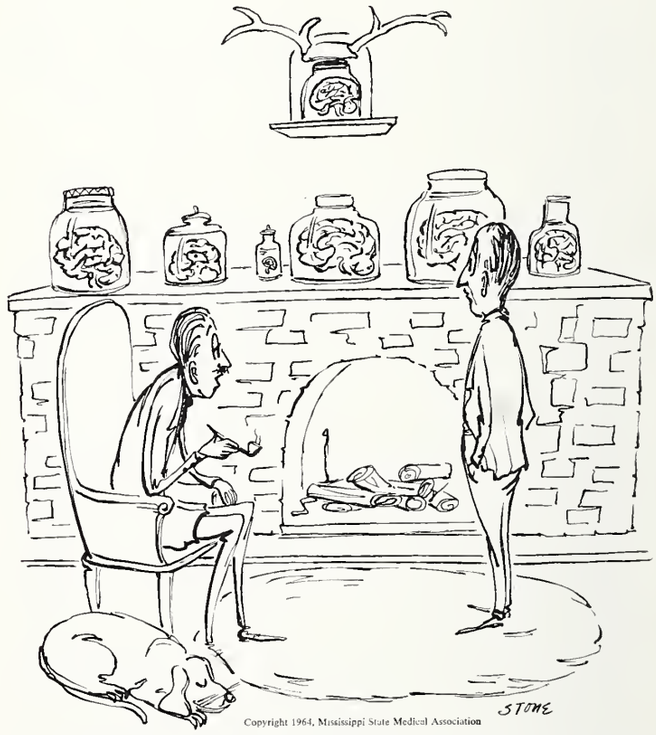
Atlas of General Surgery. By Joseph R. Wilder, M.D., director of surgery, Hospital for Joint Diseases, New York, N. Y. Illustrated by Shirley Baty. 325 pages. St. Louis: The C. V. Mosby Company, 1964. $23.50.

Christopher's Textbook of Surgery. Eighth edition. Edited by Loyal Davis, M.D. 1481 pages with 1341 illustrations on 744 figures. Philadelphia: W. B. Saunders Company, 1964. $18.50.

The Liver and Portal Hypertension. By Charles G. Child III, M.D. Volume I in the Series **Major Problems in Clinical Surgery,** J. Englebert Dunphy, M.D., consulting editor. 231 pages with illustrations. Philadelphia: W. B. Saunders Company, 1964. $8.50.

Physical Examination of the Surgical Patient. Third edition. By J. Englebert Dunphy, M.D., and Thomas W. Botsford, M.D. 396 pages with illustrations. Philadelphia: W. B. Saunders Company, 1964. $8.50.

Fundamentals of Otolaryngology: A Textbook of Ear, Nose, and Throat Diseases. Fourth edition. By Lawrence R. Boies, M.D.; Jerome A. Hilger, M.D., and Robert E. Priest, M.D. 553



"I like to get my mind off neurosurgery by going big game hunting."

pages with illustrations. Philadelphia: W. B. Saunders Company, 1964. $8.50.

The Specialties in General Practice. Third edition. Edited by Russell L. Cecil, M.D., and Howard F. Conn, M.D. 676 pages with illustrations. Philadelphia: W. B. Saunders Company, 1964. $17.50.

The Lung and Its Disorders in the Newborn Infant. By Mary Ellen Avery, M.D. Volume I in the series **Major Problems in Clinical Pediatrics**, Alexander J. Schaffer, consulting editor. 224 pages with illustrations. Philadelphia: W. B. Saunders Company, 1964. $7.50.

Reproduction and Sexual Behavior. By Charles W. Lloyd, M.D. 564 pages with 203 illustrations. Philadelphia: Lea and Febiger, 1964. $12.50.

PERSONALS

AUSTIN P. BOGGAN has announced the association of DON L. SMITH in the general practice of medicine in Decatur.

LARRY GLEN BROOME has announced the opening of offices in Sumrall for the general practice of medicine.

WILLIAM R. EURE of Bay Springs has announced the association of A. KEITH LAY.

JAMES R. HOUSE, JR. has announced the opening of his office in Jackson for the practice of general medicine.

ROBERT ASHFORD LITTLE has joined the staff of the Gulfport Eye, Ear, Nose and Throat Hospital-Clinic.

PAUL E. MINK, COLEMAN PICKLE, and J. W. MURPHY have announced the association of R. N. GILLILAND for the general practice of medicine in the Attala Medical Clinic.

PAUL L. ODOM has opened his offices in Ocean Springs for the general practice of medicine.

ONEY C. RAINES, III, is the third generation of his family practicing medicine in Gulfport. Dr. Raines is associated with Dr. R. G. BURMAN in the Woman's Clinic. He is the son of Dr. O. C. RAINES, JR., and the grandson of Dr. H. E. HOKE, both practicing physicians in Gulfport.

GLENN B. RICHARDSON of Columbus has announced the association of CHARLES O. STANBACK in the general practice of medicine.

State Morbidity Reported Through July 31

The Mississippi State Board of Health reports the following occurrence of morbidity for 1964 through the 31st week of the year, ending July 31, 1964. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	577
Tuberculosis, O. F.	140
Salmonella infections	25
Brucellosis	2
Encephalitis, infectious	16
Typhoid Fever	2
Dysentery	
Bacillary	45
Amoebic	8
Dysentery, N.O.S.	1
Food Poisoning, N.O.S.	1
Diphtheria	2
Septicemia, Staph.	8
Meningococcal infection	11
Meningitis, O.F.	21
Gastro-enteritis	1
Tularemia	3
Mononucleosis, infectious	52
Toxoplasmosis	1
Hepatitis, infectious	148
Tetanus	1
Helminthic infections	
Hookworm	639
Ascariasis	199
Strongyloides	30
Histoplasmosis	11
Streptococcus infections	
Scarlet fever	119
Strep throat	2,409
Taeniosis	2
Pertussis	107
Measles	6,682
Chickenpox	1,048
Mumps	908
Other Cestode Infestations	7
Influenza	363
Gonorrhea	3,186
Syphilis	
Early	264
Late	105

The President Speaking

'The Fight for Honest Care'

OMAR SIMMONS, M.D.
Newton, Mississippi

THE MANY FACES OF QUACKERY were frankly unveiled last May when four able essayists appeared before our 96th Annual Session at Jackson. Now, the editors of the JOURNAL have brought us a valuable and absorbing record of the Congress on Health Quackery, actually a primer on charlatanism.

Physicians, more than any others, see the handiwork of quacks in irreversible illness, shattered hope, and even preventable death. Together with other responsible segments of society, physicians seek enactment of sound laws which, when conscientiously enforced, deter practitioners of this evil trade. Unhappily, experience teaches us that laws, regulatory agencies, and even the courts are not always enough where quackery is the issue. The ultimate weapon is education and understanding, because it is the victim—not the quack—who perpetuates the evil.

In a couple of decades, a quiet revolution in health education has occurred. Where once the mere mention of venereal disease outside the guarded confines of a scientfic meeting was a severe social taboo, there are now frank, enlightened discussions of it in P-TA groups. Well-structured articles, such as those in *Today's Health,* open new horizons of understanding of the disease process for the public. This new enlightenment has taken much of the mysticism from illness and healing, but more importantly, it has created a profound awareness of medicine's growing capabilities, its mounting fund of knowledge gained in research, and its consistent extension of care and facilities.

So it goes almost without saying that informed Americans are less susceptible to the dulcet pitch of the health quack. But as education progresses, so does quackery with new and sophisticated appeals to the unsuspecting. Here is the challenge to the practicing physician, calling him to stay in the forefront of the fight for honest health care. ★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume V, Number 9

September 1964

EDITORIALS

Sic Transit Gloria COFO

By the Board of Trustees
Mississippi State Medical Association

I

The entire succession of unhappy events began in June with the influx of young zealots, marching for a cause without reason in a war without a name. This was the beginning of the much-touted "long, hot summer" during which an intraorganizational complex sent the so-called student workers into 17 Mississippi counties. Despite reams of press releases, columns of copy in the northern press, and hours of television and radio time—all devoted to this endeavor, the purpose as proclaimed still awaits verification. And one fact remains crystal clear: No service proffered in this unfortunate endeavor has demonstrably benefitted any citizen of Mississippi, nor indeed, has any been offered which is not freely available under state law or from private sources.

Had not the medical profession been attacked without justification, had not the integrity, probity, and dedication of the association's membership been irresponsibly impugned, and had not this reprehensible aspect of the propaganda enterprise been developed and pursued, the editorial voice of the scientific press would have chosen, and most properly, to address itself in customary manner to issues of health, science, and medical care. This restraint can and should no longer be exercised. But this response, spoken officially from a sufficient base of responsible authority, is neither apology nor gloss-over; if anything, it is a considered restatement of principles, made all the more forceful by external perversion and astonishing distortion.

II

On the last day of June, two Massachusetts physicians, self-proclaimed supporters of the summer project, invoked the name of Hippocrates upon the medical profession in Mississippi. The admonitions and exhortations were made by letter under the implied imprimatur of two academic institutions of notable repute. These two physicians, in suggesting that medical care might not be available to all within Mississippi, abandoned their own claim upon medicine's honored name to become *agents provocateur*.

Mississippi physicians reacted to the letter with understandably profound indignation. The mere suggestion that there might, could, or would be a failure of professional obligation on the part of any physician anywhere and for whatever motive in the absence of evidence to the contrary could be viewed only as an unwarranted, officious af-

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John B. Howell, Jr., Canton, chairman; Lamar Arrington, Meridian, vice chairman; C. D. Taylor, Jr., Pass Christian, secretary; C. W. Patterson, Rosedale; Joseph B. Rogers, Oxford; J. T. Davis, Corinth; Mal S. Riddell, Jr., Winona; W. E. Moak, Richton; and Everett H. Crawford, Tylertown.

front. Although it is apparent that most consigned the letter to the wastebasket, many replied with varied expression.

The decision was made for the association to communicate its protests through channels of formal medical organization, employing the full weight of its resources—but in a manner fully befitting and consistent with the dignity which doctors of medicine impose upon themselves and demand from their professional society. A letter was sent by the president of the association to the president of the Massachusetts Medical Society.

The latter official who represents a respected, able organization responded with equal courtesy, pointing out these pertinent facts:

—Neither of the writers of the officious letter is a member of the Massachusetts Medical Society or the American Medical Association.

—The Massachusetts Medical Society had nothing whatsoever to do with the letter.

—No officer or member of that society had knowledge of the letter.

Moreover, the president of the Massachusetts Medical Society was pleased to offer his affirmation of confidence in Mississippi physicians and in their adherence to ethical practices.

III

It came as no surprise to association leaders when they were advised that the writers of the form letter from Massachusetts attempted to have it published in the *Journal of the American Medical Association*. The editor of *JAMA* stated that "it was my judgment that nothing would be served and the implications that physicians in Mississippi were derelict in this regard could not be supported." Apparently making use of the well understood device of diplomatic protocol, the editor of *JAMA* said he returned "the letter to the sender."

The attempt of the Massachusetts writers to secure a national forum was repeated on at least one other occasion. The letter was submitted to another respected scientific journal whose editor was less kind: He sent it to the presidents of the academic institutions which employ the writers.

A final gasp came in August when the president of a national medical organization having a racially identified membership called upon the President of the United States to open federal medical facilities in Mississippi to the student workers. His announced basis for the appeal was made in terms of flimsy generalizations, devoid of documentation as to names, places, and specifics. He said, according to wire service reports, that the workers might not receive the best medical care in Mississippi because of antagonistic feeling among physicians. That the charge lacked substance is readily apparent and of little moment. What is astonishing is the absurdity of appealing a biased, undocumented cause to the President.

IV

There is a fitting epilogue to this unfortunate series of events, demonstrating that fair minded individuals, wherever they may be, have no inclination to involve the serious responsibility of health care in unfounded propaganda campaigns. Every established institution of service and dedication can become a target of unwarranted attack from those who espouse militant causes without regard for the well-being of all society.

Save for the smarting insults hurled without justification, the whole scheme lies fully exposed for what it is: The calculated smear inherent in a planned program of civil strife and disobedience. Nor has this been confined to the form it assumed in Mississippi, for the tragic, bloody goings on in Harlem, Rochester, and Jersey City grow from the same seed, planted by the same hands. That known subversive elements and individuals have participated in this perversion of freedom makes the posture of all so engaged quite tenuous.

Out-of-state physicians, few in number, to be sure, have visited the state, professing a concern for health care of the student workers. For the most part, they came, they saw, were told face to face that nobody within these borders is denied

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"I've had an unilateral oophorectomy. Thank goodness, I didn't have all my eggs in one basket."

medical care when needed, and they took their leave.

The inaccurate reporting of a second string throwaway medical publication notwithstanding, there is neither collusion nor cooperation with these misdirected endeavors by the Mississippi State Medical Association or, to the best of the association's information and knowledge, by any agency of the state. What there is, however, is a steadfast continuation of MSMA's 108 year old credo: No person will be denied medical care, and all care rendered, with the deepest sense of dedication in the highest tradition of medical ethics, will be the best of which Mississippi physicians are capable.

And while it may be more appropriate, in view of these facts and restatement of principles, to pity rather than damn, let it be understood that the association, having affirmed its dedication, sincerity, and willing acceptance of professional obligation, intends to tolerate no slander or libel upon the good name of medicine in Mississippi. We make no threats, because threats are unnecessary. If, in the pursuit of duty, it should become necessary to stand before equity, Mississippi physicians will be able to do so with clean hands and hearts. ★★★

Simmons-Baty Letters Are Released

For the information of all members of the association, the full texts of the letters exchanged between Dr. Omar Simmons, president of the Mississippi State Medical Association, and Dr. James Marvin Baty, president of the Massachusetts Medical Society, are published:

July 8, 1964

James Marvin Baty, M.D., President
Massachusetts Medical Society
22 The Fenway
Boston, Massachusetts 02215

Dear Doctor Baty:

On June 30, two Massachusetts physicians, Drs. Joseph H. Brenner and Robert Coles, respectively associated with the Massachusetts Institute of Technology and Harvard University, sent a form letter to all physicians in Mississippi.

In their letter, Drs. Brenner and Coles quote a portion of the Hippocratic Oath, urging that Mississippi physicians render medical care to the college students now engaged in work described to us as being in behalf of civil rights in our state. The reaction from the profession throughout Mississippi to the letter has been one of profound indignation. We are, indeed, distressed to believe that any physician anywhere—for whatever motive—would suggest a failure of professional obligation, either by inference or direct assertion, on the part of another doctor of medicine unless he possessed conclusive evidence of such failure.

As among the respected physicians of your own state, Mississippi doctors of medicine have a proud record of service. Our participation in private and formal programs of charity care without compensation has been remarkable and the subject of commendation by a committee of the Congress. Our 108 year old state medical association has historically guaranteed medical care for all without exception, regardless of ability to pay. With no wish to belabor the point, I am in position to assure you that no individual within our state will be denied care which, in every instance, will be the best of which we are capable of rendering.

I therefore share the indignation felt by my colleagues upon receipt of the letter from Drs. Brenner and Coles. Their admonitions and exhortations are, at least, a serious breach of medical etiquette and, at worst, an unwarranted, officious affront which impugns the integrity, probity, and dedication of men and women who have given themselves to the art and science of healing. If Drs. Brenner and Coles possess evidence of the failure of any physician in our state to discharge his professional obligations, then I feel it their duty and responsibility to document such evidence to our association for prompt processing and decisive response.

I am unable to believe that the sense of the letter is in any way representative of the views of the Massachusetts Medical Society or of its distinguished leadership in American medicine. Moreover, I hesitate to accept the implication that either physician speaks for the respected academic institution with which he is affiliated. We can agree, I am sure, that neither the Principles of Medical Ethics nor the Hippocratic Oath is circumscribed by geographic boundaries or is provincial and regional in character or application.

While your society is in no way joined in this communication, we hope most fervently that you will reaffirm your confidence in your Mississippi colleagues, especially in view of the assurances which I have endeavored to convey, thereby disassociating yourselves from any possible relationship to this unjustified communication. We hope further that Drs. Brenner and Coles make suitable

representations to their Massachusetts colleagues to whom such unnecessary admonitions would never occur.

I am deeply grateful for your consideration of this unfortunate matter, and I look forward to the privilege of meeting and discussing this personally with you.

Sincerely,
OMAR SIMMONS, M.D.
PRESIDENT

July 15, 1964

Dr. Omar Simmons, President
Mississippi State Medical Association
735 Riverside Drive
Jackson, Mississippi 39216

Dear Dr. Simmons:

Thank you for your recent letter and a copy of the letter which was sent by Dr. Joseph H. Brenner and Dr. Robert Coles to the physicians practicing in Mississippi.

I assure you that the Massachusetts Medical Society had nothing to do with the compilation or distribution of this letter. So far as I know, no one associated with the Society in an official capacity knew anything about this letter or the circumstances which motivated its sending. In fact, neither Dr. Joseph H. Brenner nor Dr. Robert Coles are members of the Massachusetts Medical Society.

I am pleased to offer you and the members of your State Society my confidence in your efforts to practice ethically. I am sure that no one in our Society would condone such implications as you interpreted in the letter that was sent to you.

I hope that I will have the chance of meeting you and discussing this matter with you, possibly in Miami.

Sincerely yours,
JAMES MARVIN BATY
PRESIDENT

Biostatistical Baloney, *Reader's Digest* Style

The *Reader's Digest* is the biggest mass circulation magazine in the world, selling 25 million copies in 13 languages each month. That unto itself is the best reason possible for this publication to bend over backwards in the quest for accuracy and objectivity. But these journalistic virtues are strangely absent from the article, "Why Do We Let These Babies Die?" in the August 1964 issue.

The author, Dr. David D. Rutstein of the Harvard Medical School, and his collaborator, science writer J. D. Ratcliff, decry the infant mortality rate in the United States, making liberal use of techniques which does neither of them credit. After pointing out that "a baby born this morning in Utah, our state of lowest infant mortality, has a poorer chance for survival than one born above the Arctic Circle in Sweden," they proceed to compare death rates at birth up through the first year of life in 11 nations, beginning with the "low" of 15.3 per 1,000 in Sweden up to the damning 25.3 in the United States. This is about as valid a comparison as the relationship between the tides at Cape Cod and the city water pressure in Denver. And it's difficult to believe that Dr. Rutstein and Mr. Ratcliff are oblivious to this, too.

The article advocates a vastly expanded, nationwide nurse-midwife program, citing experience in New York where "nurse-midwives and students have delivered over 4,500 mothers with an astoundingly low infant loss." Just how this relates to infant mortality 11 months removed from the neonatal period of 28 days may escape most of us. The authors call for organized medicine to attack the problem, naming AMA, the American College of Obstetricians and Gynecologists, and the American Academy of Pediatrics. In 1959, AMA hammered out agreements among these and nine other respected organizations on guides and definitions for the study of perinatal mortality and morbidity.

In fact, Dr. Rutstein ought to be aware of this: He lists himself as a member of at least two of the organizations sponsoring these studies. A sentence in his final paragraph of the article, however, seems to suggest a concomitant goal; he says that "the federal government should assume the job of instructing prospective mothers in the need for better care and the measures for obtaining it."

We hope and believe that the authors share the genuine deep concern over perinatal death which has moved American medicine to initiate, develop, and support with dues funds programs of research, study, and positive action to bring about decreases in the rate. This is to emphasize that differences are over methodology and not over end results. And it is to be doubted that loose use of vital statistics to the end of having every American mother delivered by a bearded obstetrician in a red, white, and blue suit is the answer.

Responsible biostatisticians point out that comparisons among nations of mortality, morbidity,

and health levels based only on rates, ratios, or averages mean little or nothing unless demographic, social, and economic factors are also compared. Thus, the Rutstein-Ratcliff comparison of the babies born in Utah and northern Sweden is at least irrelevant and at worst, a patent misrepresentation.

Among the nations of the world, great differences exist in legal and scientific definitions as to what constitutes a fetal or infant death. What may be recorded as a live birth and an infant death in one country may legally and scientifically be a stillbirth and a fetal death in another. About the only thing the *Digest* article authors can really prove is that an American of Swedish descent in Minnesota lives longer than a Swede in Sweden.

As for infant deaths up to one year, there are probably very few if any north of the Arctic Circle resulting from automobile accidents, but we have the sad duty of recording these every year in nearly every state. Dr. Donald Mainland of New York University Medical Center, a dean among biostatisticans, cautions that "death rates classified by region depend on the rules, sometimes local rules, observed in tabulation." His advice on bias is pertinent, too: "Causation in medicine is like an iceberg, mostly hidden from view, but we often behave as if what we can see is all that matters, and we disregard the submerged mass that may wreck our causal inferences."

Dr. Rutstein and Mr. Ratcliff, consider yourselves wrecked.—R.B.K.

REFERENCES

1. Rutstein, D. D., and Ratcliff, J. D.: Why Do We Let These Babies Die? Reader's Digest 85:56 (Aug.) 1964.
2. A Guide for the Study of Perinatal Mortality and Morbidity, Chicago, American Medical Association, 1959.
3. Mainland, D.: Elementary Medical Statistics, Philadelphia, W. B. Saunders Co., 1963.

Labor Pains in Our Hospitals

In a quiet, generally unpublicized manner, labor forces in the Congress are implementing a blueprint for hospitals which may threaten their continued existence as nongovernmental institutions. With little fanfare, Rep. James Roosevelt (D., Calif.) has introduced H.R. 11838 which, if enacted, would apply the so-called Fair Labor Standards Act of 1938 to most hospitals and nursing homes. Such a step is integral, organic, and necessary to forcing these institutions into a compulsory bargaining posture with labor.

The measure would amend the law to include "any establishment which is a hospital or which is an institution primarily engaged in the care of the sick, the aged, the mentally ill or defective, residing on the premises of such institution" if its gross annual income were not less than $250,000, regardless of whether operated for profit or not. Automatically, wage and hour standards up to minimums of $1.25 per hour for a 40 hour week, with time and a half thereafter, would be applied.

Failure to meet the minimums could result in fines up to $10,000 or imprisonment for hospital management, and employees would be entitled to recover double wages as liquidated damages. Of course, the next step would appropriately be federal financing and control. It's neat strategy, too, because it obviates the necessity of all the King-Anderson red tape.—R.B.K.

LETTERS

SIRS: I want to thank your entire association for the wonderful help you rendered the Legislature through your "Doctors of the Day" program. You will never realize how much you have meant to us, especially those whose hearts tick a little fast at times.

This was the longest and hardest session I have been through in 18 years, and I know it was tough on you to keep busy men there to look after us. I received so many words of thanks from the membership after your association decided to help us again in the Special Session.

GEORGE P. COSSAR
MEMBER
MISSISSIPPI HOUSE OF REPRESENTATIVES
TALLAHATCHIE COUNTY

DEATHS

COE, ISAAC STEPHEN, Lambert. M.D., University of Tennessee College of Medicine, Memphis, 1933; interned St. Joseph Hospital, Memphis, Tenn., one year; major, U. S. Army, emeritus member of MSMA; died July 7, 1964, aged 55.

GILLESPIE, CHARLES RIDLEY, Laurel. M.D., Emory University School of Medicine, Atlanta, Ga., 1933; interned Macon Hospital, Ga., one year; residencies, Johns Hopkins Hospital, Baltimore, Md., Grady Memorial Hospital, Atlanta, Ga., Vanderbilt University Affiliated Hospitals, Nashville, Tenn., and the New York Post Graduate Hospital; past president of the Jones County Medical Society, the Mississippi Pediatric Association, and the South Mississippi Medical Society; former secretary of the Mississippi Pediatric Association; member, the Mississippi Pediatric Society; major, U. S. Army; died July 2, 1964, aged 56.

HUDSON, ROBERT PERCY, Utica. M.D., University of Louisville School of Medicine, Ky., 1934; member, American Academy of General Practice; died Aug. 9, 1964, aged 54.

HUGHES, JAMES HERMAN, Kossuth. M.D., Memphis Hospital Medical College, Tenn., 1909; member of the MSMA Fifty Year Club; died July 13, 1964, aged 83.

MASON, JAMES NEWBERRY, Purvis. M.D., University of Tennessee College of Medicine, Memphis, 1909; interned University of Tennessee College of Medicine, Memphis; post graduate course in public health, Vanderbilt University Hospital, Nashville, Tenn.; presented "Golden T" certificate by the University of Tennessee Colleg of Medicine, Memphis, for loyal medical service; Emeritus member of MSMA and member of the MSMA Fifty Year Club; died July 1, 1964, aged 79.

Hearing Is Set on Blue Shield Fees

The association's 12 Blue Cross-Blue Shield directors, responding to requirements of a resolution adopted at the 96th Annual Session last May, will meet at Jackson in Sept. to consider views of MSMA members on professional fee aspects of the Blue plan. The resolution, sponsored by the Coast Counties Medical Society, resolves "that the Mississippi State Medical Association through its 12 directors of the Blue Cross-Blue Shield Plan exert an effort to reevaluate Blue Shield (physicians') payments in the light of present medical care costs."

Dr. Lamar Arrington of Meridian, a Blue plan director and past president of MSMA, has been named chairman for purposes of conducting the meeting. He said that members of the association would be welcome to appear in person or to submit written statements in letter form. The meeting will convene at 7:00 p.m. in the conference room of the MSMA headquarters building, 735 Riverside Drive, in Jackson, on a date to be announced.

The conditional clauses of the resolution state that "fees and payments for medical care allowed by Blue Cross for hospital coverage have gradually increased with concomitant increases in premium costs" but that "Blue Shield fee and payments have not increased materially for professional services rendered by physicians in a number of years."

The purpose of the hearing, the announcement continued, is to receive views in this connection by practicing physicians who are members of the association. A final report of the study is expected to be presented to the House of Delegates through the Board of Trustees.

MSMA-nominated Blue plan directors are Drs. R. B. Caldwell of Baldwyn, G. Swink Hicks of Natchez, George H. Martin of Vicksburg, T. E. Ross of Hattiesburg, S. Lamar Bailey of Kosciusko, M. Q. Ewing of Amory, Joseph B. Rogers of Oxford, James G. Thompson of Jackson, Lamar Arrington of Meridian, William N. Crowson of Clarksdale, A. K. Martinolich, Jr., of Bay St. Louis, and Walter H. Simmons of Jackson.

Ob-Gyn Board Announces Part I Exams

The next scheduled Part I (written) examination of this Board will be held at various examining centers in the United States, Canada, and military bases outside of the continental United States on Friday, Dec. 11, 1964, at 2:00 p.m. Candidates eligible to take this examination will be notified on or about Nov. 1 where to appear for examination.

Beginning in 1965, the Part I (written) examination will be given early in July. All candidates (including new and reopened applicants as well as re-examinees) having completed an approved and progressive residency program on or before July, 1965 will be eligible to request admission to the Part I examination in 1965.

The 1964 Bulletin containing detailed information on the requirements and procedure of application relative to the new schedule of examinations beginning in 1965 is now available for mail distribution.

Natchez Postgraduate Medical Society Boosts Education for Area Physicians

Now entering its seventh month, the Natchez Postgraduate Medical Society, an organization unique in Mississippi medicine, boasts an enthusiastic membership solidly behind the society's purpose of "promoting postgraduate medical education within the Natchez Adams County area."

The society grew out of the old Journal Club, according to Dr. Phil K. Springer, secretary, which in turn grew out of the need for a postgraduate forum. Founded in 1962, the Journal Club was organized when physicians found that "Homochitto Valley Medical Association meeting schedules were generally filled with economic problems and political issues and hospital staff meetings were crowded with death reports and business on improvement of the hospital."

Response to the Journal Club was "most encouraging," noted Dr. Springer. Attendance averaged 30 physicians for each meeting in a town with only approximately 40 active physicians, he said. Many of the physicians attending came from as far away as Centerville and Woodville, Miss., and Newelton, Waterproof and Ferriday, La.

A highlight of the Journal Club's two years was a medico-legal meeting featuring Dr. Rudolph J. Mulling, Jr., professor of pathology, University of Kentucky and an authority on forensic pathology. The meeting was attended by 60 professional persons, including approximately 25 local attorneys.

On Feb. 15, 1964, the Journal Club was formalized and renamed the Natchez Postgraduate Medical Society. The group's charter set dues at $10 and within a short time the treasury totaled $300. With these funds the society was able to complement drug company funds for honorariums and speakers' expenses. The group meets monthly on the third Tuesday for a buffet and lecture.

Dr. Springer noted that one important development has been the discovery that both general practitioners and specialists in the area are interested in research topics and are not solely committed to programs of clinical importance. He said that their experience shows that postgraduate efforts need not be separated into programs for specialists and programs for general practitioners.

Officers and members of the Natchez Postgraduate Medical Society discuss the group's future plans. From the left are Drs. Leo Scanlon, Phil Springer, Edwin Benoist, William Godfrey, John Davis, and Walter Colbert. The Society, which meets monthly, was formalized Feb. 15, 1964.

At a recent business meeting, the membership voted financial support for one scientific meeting a year for the District Nurses Association. The society wishes to encourage postgraduate medical education for nurses and paramedical personnel also, Dr. Springer said.

Officers of the Natchez Postgraduate Medical Society are Dr. John I. Davis, internist, Natchez Medical Clinic, chairman; Dr. Bill Godfrey, obstetrician and gynecologist, Barnes Clinic, treasurer; Dr. Phil K. Springer, general practitioner, Morgantown Clinic, secretary.

Members of the Board of Directors include the general officers and Dr. Leo Scanlon, pathologist, Jefferson Davis Memorial Hospital; Dr. Walter Colbert, radiologist, Jefferson Davis Memorial Hospital; Dr. James G. Krestensen, radiologist, Jefferson Davis Memorial Hospital; Dr. Robert Barnes, surgeon, Barnes Clinic; Dr. Gerald Foret, general practitioner, Natchez Polytechnic, and Dr. Don Killelea, pediatrician, Barnes Clinic.

Ground Broken For Shriners Burn Institute

Ground-breaking ceremonies were conducted June 23 for the first Shriners Burn Institute of Shriners Hospitals for Crippled Children at the University of Texas Medical Branch in Galveston.

A former professor of surgery at the University of Mississippi School of Medicine, Dr. Curtis P. Artz, is chief surgeon of the Institute, one of three to be constructed. The other two will be located in Cincinnati and Boston.

Constructed and equipped at a cost of $3.3 million, the Galveston Institute, a 30 bed unit, will be devoted to patient care, research, and teaching. Dr. Artz said, "During the past several years, statistics show that about 7,300 persons died each year from burns. Extensive burns are one of the most complex illnesses to which man is liable and a knowledge of almost every principle taught in surgery is required for the treatment of severe burns."

The Shrine has allocated $10 million for the construction of the three burn institutes. Each unit will be operated on an annual budget of $1.2 million, provided by the Shrine's 830,000 members plus gifts from the general public. The University of Texas Medical Branch is responsible for assembling the professional staff and for the technical operation of the Galveston unit.

Breaking the ground for the first Shriners Burn Institute are, left to right, Harold C. Close of Hartford, Conn., Imperial Potentate of the Shrine of North America; Dr. Truman G. Blocker, Jr., acting executive director, University of Texas Medical Branch, and Dr. Curtis P. Artz, Shrine Professor of Surgery and Chief Surgeon of the Shriners Burn Institute.

Dr. McClanahan Invested As Trustee Emeritus

Dr. H. H. McClanahan, Jr., of Columbus was invested with the designation of Trustee Emeritus of the Mississippi State Medical Association at a special August 5 ceremony in Columbus.

Dr. McClanahan, who retired in May, had served as a member of the MSMA Board of Trustees since 1952 and as Board chairman since 1958.

In a special ceremony conducted by Dr. John B. Howell, Jr., of Canton, Board chairman, and other Board officers, Dr. McClanahan was presented a plaque which read:

"Hick Hartsell McClanahan, Jr., M.D. having served the association with unusual capacity and leadership in the discharge of high office as Chairman of the Board of Trustees and having rendered outstanding service, has been proclaimed Trustee Emeritus by the House of Delegates and is invested with this designation of honor for life."

The plaque was signed by Drs. Omar Simmons of Newton, MSMA president; Everett H. Crawford of Tylertown, president-elect John B. Howell,

Jr., Board chairman; Lamar Arrington of Meridian, Board vice chairman; C. D. Taylor, Jr., of Pass Christian, Board secretary; James L. Royals of Jackson, MSMA secretary-treasurer; Howard Nelson of Greenwood, speaker of the House of Delegates; William E. Lotterhos, vice speaker, and Mr. Rowland B. Kennedy, MSMA executive secretary.

The resolution proclaiming Dr. McClanahan as Trustee Emeritus was adopted unanimously by the MSMA House of Delegates at the 96th Annual Session in Jackson in May. This is the first such designation to be awarded by the association in its 108 years.

Dr. McClanahan was born at Columbus in 1909. He received his Bachelor of Arts degree from the Mississippi College in 1929 and his Master of Science degree in physiology from the University of Tennessee in 1933.

From 1931-1933, Dr. McClanahan served as an instructor in the School of Biological Sciences, University of Tennessee. From 1933 until 1936 he served as an instructor at the University of Mississippi School of Medicine. By concurrent work at Rush Medical College during the tenure of this appointment, he received his M.D. degree. He interned at Billings Memorial Hospital in Chicago and served his residency in internal medicine at the University of Chicago Clinics and at Indiana University Medical Center.

Entering service as a medical officer in the United States Navy Reserve, Dr. McClanahan served on active duty with the Marine Corps from May 1942 until March 1946, attaining the rank of Lieutenant Commander. He then returned to Columbus to engage in private practice, limited to internal medicine. He has been active in scientific medical organization and is a member of the Northeast Mississippi Medical Society, the Mississippi State Medical Association, the American Medical Association, and the Memphis Academy of Internal Medicine.

At an Aug. 5 ceremony in Columbus, Dr. H. H. McClanahan, Jr., second from right, was invested as Trustee Emeritus of the Mississippi State Medical Association and presented a specially designed plaque. Shown with Dr. McClanahan are from the left, Dr. Omar Simmons, Dr. John B. Howell, Jr., Jan McClanahan, son of the honoree, and Mrs. McClanahan. Dr. Howell conducted the ceremony.

About 1950, the Columbus internist accepted an appointment as a member of the Committee on Medical Education, Mississippi State Medical Association, which group worked as the official representative body of the association with the University of Mississippi and other state officials in formulating plans for the new four-year medical school. He has also served as an officer in his county medical society, being secretary from 1951-1957

The ceremony honoring Dr. McClanahan was attended by the general officers of the Mississippi State Medical Association and members of the Board of Trustees.

New Orleans Assembly Sets 28th Meet

The 28th annual meeting of the New Orleans Graduate Medical Assembly will be held March 8-11, 1965, headquarters at The Roosevelt Hotel.

The following physicians have been named as officers and members of the Executive Committee for this year: Philip H. Jones, president; Mannie D. Paine, Jr., president-elect; L. Sidney Charbonnet, Jr., first vice-president; H. Reichard Kahle, second vice-president; Simon V. Ward, third vice-president; Friedrichs H. Harris, secretary; Samuel R. Staggers, treasurer; C. Richard Walters, director of program; William B. Clark, assistant director of program; Louis A. Monte, assistant director of program.

Members of the Executive Committee include Drs. Walter F. Becker, Frederick F. Boyce, George M. Haik, W. E. Kittredge (retiring president), and Robert L. Simmons.

NEW MEMBERS

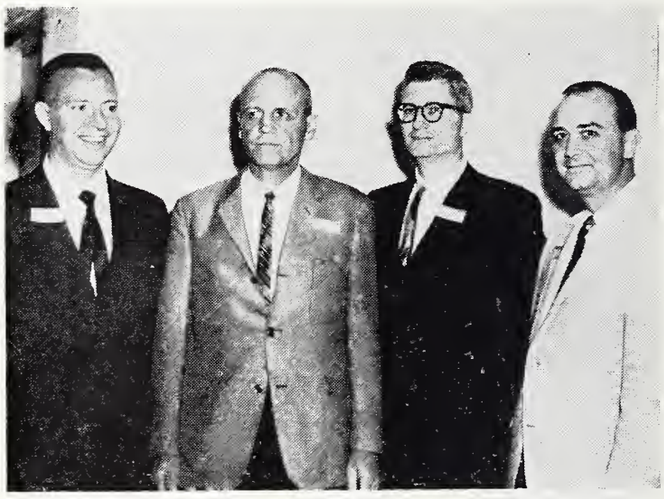
The following physicians have been elected to membership in their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

DiSanti, Nicholas, Pascagoula. Born New York City, N. Y., April 25, 1925; M.D., Tulane University School of Medicine, New Orleans, La., 1959; interned Charity Hospital of Louisiana, New Orleans, one year; ob-gyn residency, Charity Hospital of Louisiana, New Orleans, three years; elected May 6, 1964, by Coast Counties Medical Society.

Everett, William Freeman, Biloxi. Born Forest, La., March 27, 1920; M.D., Louisiana State University School of Medicine, New Orleans, 1943; interned Charity Hospital of Louisiana, New Orleans; orthopedic surgery residency, Charity Hospital of Louisiana, New Orleans; certified by the American Board of Orthopedic Surgery; Fellow, American Academy of Orthopedic Surgeons, and the American College of Surgeons; elected May 6, 1964, by Coast Counties Medical Society.

Simmons, Samuel Joseph, III, Pascagoula. Born Arcadia, Fla., Oct. 30, 1930; M.D., Tulane University School of Medicine, New Orleans, La., 1959; interned Touro Infirmary, New Orleans, La., one year; residency, Charity Hospital of Louisiana, New Orleans, three years; elected May 6, 1964, by Coast Counties Medical Society.

Dr. Hardy Addresses Northeast Society



Dr. James D. Hardy, second from the right, addressed the Northeast Mississippi Medical Society on gastric and duodenal diseases. Shown with Dr. Hardy are, left to right, Dr. S. Jay McDuffie of Nettleton, secretary-treasurer; Dr. Eric McVey of Macon, president, and Dr. Bob Caldwell of Tupelo, program chairman. Following his address, Dr. Hardy, who is professor and chairman, department of surgery, University of Mississippi School of Medicine, moderated a panel discussion. Panel members were Dr. Cecil McEwen of Columbus, pediatrics; Dr. Henry Holleman of Columbus, general surgery; Dr. Bill Kellum of Tupelo, internal medicine, and Dr. Jack Stacy of Tupelo, radiology.

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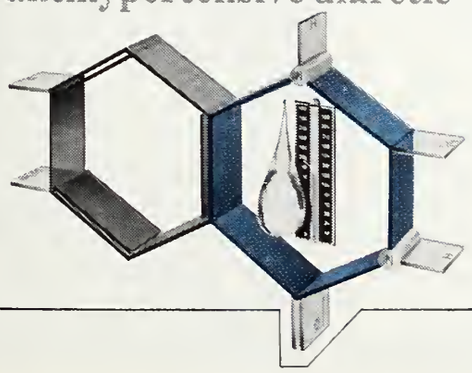

HYDROMOX Quinethazone is excellent for use in early hypertension. Extremely well tolerated, the average reported reduction in diastolic pressure is 15 mm. Hg,[1,2] just right for patients with mild to moderate diastolic elevations. Systolic pressure lowered accordingly. A convenient, single daily dose of one to two 50 mg. tablets is usually sufficient.

INDICATED in hypertension with or without edema, and in all types of edema involving salt retention. May be helpful in some cases of lymphedema, idiopathic edema and edema due to venous obstruction.

SIDE EFFECTS: Skin rash (rare), gastrointestinal disturbances, weakness and dizziness, seldom so severe that drug should be stopped. Generally, the adverse effects sometimes associated with the thiazide diuretics are possible. Pre-existing electrolyte abnormalities may be aggravated.

CONTRAINDICATION: Anuria.

1. Steigmann, F., and Griffin, R.: Evaluation of Quinethazone, a New Diuretic. J. Amer. Geriat. Soc. 11:945 (Oct.) 1963.

2. Schwartz, M.: Office Evaluation of a New Diuretic in Patients with Hypertensive Diseases. Scientific Exhibit Presented at the Clinical Meeting of the American Medical Association, Los Angeles, California, Nov. 25-28, 1962.

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MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Meeting, Nov. 29-Dec. 2, 1964, Bal Harbour, Fla. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn, Chicago 10, Ill.

American College of Surgeons, Clinical Congress, Oct. 5-9, 1964, Chicago. Samuel P. Harbison, Secretary, 40 East Erie, Chicago 11, Ill.

Southern Medical Association, Nov. 16-19, 1964, Memphis, Tenn. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 10-13, 1965, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday January, First Wednesday March, May, July, September, November. Charles D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

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Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March, June, September, and December. William E. Riecken, Jr., P. O. Box 831, Kosciusko, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday April and October, Oxford. Vernon B. Harrison, P. O. Box 36, University, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucius Olen Crosby Memorial Hospital, Picayune, Secretary.

South Central Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.

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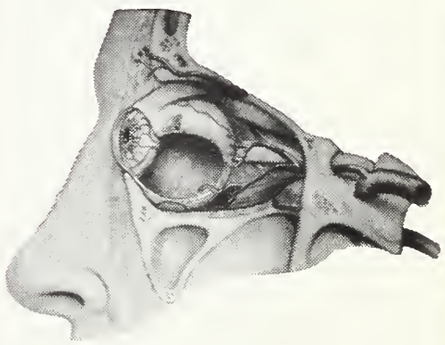

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ACS Sectional Meet Set for Atlanta

The American College of Surgeons will hold the first of three 1965 Sectional Meetings Jan. 25-27 in Atlanta, Ga. More than 500 surgeons are expected to attend this scientific three-day program, open to all doctors of medicine. Headquarters hotel will be the Atlanta-Biltmore.

Sectional meetings are short, concentrated programs designed to inform the medical profession at large about developments in surgery. Surgeons of outstanding ability serve as teachers, focusing attention on newer ways of handling problems encountered in day-to-day practice. Panels, symposia, papers, and films of value are presented.

More than 50 participants are listed on the program, which will include sessions in the specialties of thoracic and plastic surgery as well as in general surgery. Among topics of discussion: treatment of tetanus, gastrointestinal bleeding of obscure etiology, chemotherapy of cancer, left lower quadrant abdominal mass, pelvic inflammatory disease, principles of organ transplantation, septic shock, thermal burns, repair of cleft palate complications, surgery of arthritic hand.

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Volume V
Number 10
October 1964

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The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, $5 per annum; $1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

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THIS MONTH

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Nursing Education Cost Study Released

Operating schools of nursing in the United States costs American hospitals an estimated $250 million a year, according to a study report just issued by the National League for Nursing, New York.

In a six year study on costs in nursing education, made under a grant from the U. S. Public Health Service, the League found that hospitals under public control spend more money to educate nursing students than do hospitals under private control, and that schools spend more on noneducational functions such as student maintenance than they do on educational functions.

The report, "Study on Costs in Nursing Education—Part I," covers costs only in diploma programs in nursing. These are generally three year nursing education programs conducted by hospitals. They prepare more than 75 per cent of the annual 32,000 professional nursing graduates. The second part of the report, dealing with nursing education in colleges and universities, will be published in the fall.

Participating in the first phase of the study were 126 diploma nursing programs representing varying enrollment sizes, types of control, and geographic locations. By applying a uniform system of cost analysis to this representative sampling of the diploma nursing school population in the United States, the League researchers found that—

—The median gross of educating one student for one year in a diploma nursing program is $2,600; the median net cost $2,300.

—The median yearly income to the hospital per student to defray cost of the program is $250. This includes tuition, fees for room and board, health services and student insurance, and income from contributions and gifts.

—The estimated value of the student's clinical experience to the hospital and other institutions in which she serves while learning nursing is $750.

—Of the $2,600 gross costs of nursing education $1,500 goes for noneducational functions of the school (including housing, meals, laundry, recreation, and separate health services) and $1,100 for educational functions (including the

(Turn to page 8)

The Professional Purchasing Association is an association of members of the medical profession formed for their mutual benefit. It has become the largest professional buying organization in the nation. Its members practice in every state. Its affiliated suppliers are the American Hospital Supply Corporation, and Scientific Products.

The sole purpose of the association is to save money for its members on: (1) injectable drugs of all major manufacturers; (2) expendable supplies; (3) office equipment; (4) instruments; (5) building, buying and leasing of fully equipped office buildings, clinics and hospitals; and (6) leasing new automobiles.

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NURSING STUDY / Continued

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—Of the $2,300 median net cost, $1,400 goes for noneducational functions, compared with $900 for educational functions.

Applying statistical tests to the resulting analyzed costs, the researchers found that the cost of nursing education differed significantly among programs grouped by enrollment size, geographic region, and type of control:

The cost of nursing education per student was highest in programs with fewer than 70 students enrolled and was least in programs with more than 120 enrolled. The cost of instruction was higher per student in the North Atlantic region than in any other region of the country. The cost of nursing education per student was greatest in programs under city government aegis and least in programs under the control of religious institutions.

The League's study is the first to include cost data on the nursing education costs incurred by cooperating hospitals—specialized hospitals that offer diploma students courses in such areas as psychiatric nursing and the nursing of children. The report includes results of cost analysis of 117 cooperating hospitals providing these special courses.

The report also contains self-helps for those who are not familiar with the methods used in the study. A simplified example of the process of cost analysis and a description of statistical methods are included.

The "Study on Cost of Nursing Education—Part I" is available from the National League for Nursing, 10 Columbus Circle, New York, N. Y. 10019, for $2.00 a copy.

ACS Sectional Meet Set for Atlanta

The Atlanta Sectional Meeting of the American College of Surgeons has been set for Jan. 25-27.

Speakers and papers on the agenda for Monday Jan. 25 include Dr. Champ Lyons of Birmingham, "The Prophylaxis and Treatment of Tetanus"; Dr. Curtis P. Artz of Houston, "Selective Vagot-

(Turn to page 20)

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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

October 1964

Dear Doctor:

Shocked by deaths of two players in the 1964 football season, Mississippi fans and parents may erroneously conclude that the sport is deadly. But the facts prove the opposite, according to the American Football Coaches Association. Analyses of accidental deaths in the 15-to-25 year age bracket show only one football fatality for 265 auto deaths, 337 drownings, and 241 fatal mishaps involving firearms.

> With advert of physicians' active participation in prevention of football injuries, the game is getting even safer. New helmet designs and improved protective equipment are reducing playing mishaps. AMA regularly sponsors athletic safety meetings.

One outfit supporting fedicare has all the earmarks of being more of a business than an organization dedicated to the wellbeing of the aging. The American Association of Retired Persons, in addition to supporting Social Security care, operates a world cruise travel bureau and a mail order drug business. Its by-laws advocate "a shift from a work-centered society to one that is leisure-centered."

The American pharmaceutical industry is one of the biggest - and quietest - contributors to charity, education, and research. In 1963, just 77 drug firms gave over $43 million of which half was in products. Cash to schools and universities hit $9 million, and $6 million went to community civic, cultural, and health activities, such as United Givers. Remaining $5 million was put on professional education activities.

Almost unnoticed in Washington melee, Congress quashed a bill to forgive payment of federal loans to medical and dental students. Liberal senators passed amendment to federal aid to professional education act writing off student loans when graduates practice in "shortage areas." More conservative House of Representatives killed measure in mid-September.

The suicide rate in the U.S. rose sharply in the last decade, more rapidly for females than males and more for nonwhite than white persons. Most surprising increase was in 15-to-19 age group where rate zoomed 50 per cent, but greatest jump in overall rate was for nonwhites, 23 per cent among males and 41 per cent among females.

Sincerely,

Rowland B. Kennedy
Executive Secretary

DATELINE - MEDICAL AMERICA

Narcotic Addiction Picture Is Basically Unchanged In U.S.

Washington - The U.S. Bureau of Narcotics, in its newest report, says that the addiction picture in the United States is virtually unchanged from 1963. Of about 50,000 recorded addicts, 23,500 are in New York, 7,000 are in Illinois, 6,700 are in California, 1,700 are in Michigan, and 9,400 are located elsewhere. Of this total, 54 per cent are Negro, 27 per cent are white, 5.6 per cent are Puerto Rician, 6.6 per cent are Mexican, and 1.0 per cent constitute all others. Mean age group of addicts is 21 to 30 years.

National Intern Matching Program Is Proving Successful

Evanston, Ill. - The Association of American Medical Colleges is reporting new successes with the National Intern Matching Program. In 1964, 54 per cent of the interns matched went to major teaching hospitals, while almost 30 per cent were given posts in nonaffiliated but major hospitals. Whereas, formerly, interns sought training in federal facilities, only 7 per cent are now trained in military or VA hospitals.

AMA-ERF Is Significantly Influencing Medical Education

Chicago - The American Medical Association Education and Research Fund is materially helping one-third of all students, interns, and residents trained in U.S.-approved schools. Almost 10,400 loans have been made in the principal amount of $21.5 million of which 383 are in Mississippi in the amount of a half a million dollars. A safe investment through AMA-ERF, only eight of 15,000 borrowers have defaulted, four through death.

Nurse Training Program Is Signed Into Law

Washington - President Johnson signed into law a new $282 million nurse training program, providing for construction grants of collegiate schools, to help defray costs of nurse training, and for traineeships of advanced courses and special student loans. New law provides $90 million over four years for new nurse training construction grants and for degree training schools in university facilities.

New Baby Boom Is Forecast By Health Insurance Institute

New York - Health insurance statisticians say that by 1970 the U.S. will experience the biggest baby boom since World War II. Forecasts put new birth rate at plus 5 million per year. Main explanation for plethora of births is number of women in age 21-to-30 group, the main childbearing age, which will increase from 11 million now to 15 million in 1970. Insurance underwriters are anticipating boom and providing for upsurge.

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ACS MEET / Continued

omy in the Treatment of Duodenal Ulcer"; Dr. J. Lynwood Herrington, Jr., of Nashville, "Methods of Postoperative Gastric Decompression"; Dr. Robert A. Schimek, "Treatment of Ophthalmological Complications of Endocrine Exophthalmos."

Panel discussions on the opening day will consider "Gastrointestinal Bleeding of Obscure Etiology" and "Chemotherapy of Cancer." Moderators and panelists will include Drs. Rudolf J. Noer of Louisville; Raleigh R. White of Temple, Texas; Thomas B. Patton of Birmingham; Raymond W. Postlethwait of Durham, N. C.; Warren H. Cole of Chicago; Isadore Cohn, Jr., of New Orleans; R. Lee Clark of Houston; Robert L. Brown of Atlanta.

Three papers will be featured on the plastic section also scheduled for Monday, Jan. 25. These include "Correction of Mandibular Prognathism" by Nicholas G. Georgiade of Durham, N. C.; "Surgery of the Arthritic Hand" by Jerome E. Adamson of Norfolk, Va., and "Rehabilitation of the Injured Hand" by Erle E. Peacock, Jr., of Chapel Hill, N. C.

Panel discussions during the plastic meeting will include "Repair of Cleft Palate Complications," "The Present Use of Synthetic Materials in Plastic Surgery," and "Reparative Surgery after Facial Cancer."

During Tuesday's general meeting, papers will include "Management of Malignant Tumors of the Ovary" by Dr. Roy V. Boedeker of St. Louis; "Management of Tumors of the Vulva and Vagina" by Dr. Lawrence L. Hester of Charleston, S. C.; "Endometriosis: Ways and Means of Management" by Dr. John R. McCain of Atlanta; "Treatment of Cancer of the Cervix Uteri" by Dr. William N. Thornton, Jr., of Charlottesville; "Treatment of Cancer of the Corpus Uteri" by Dr. Michael Newton of Jackson, and "Management of Pelvic Inflammatory Disease" by Dr. William H. Jones of Birmingham.

A panel moderated by Dr. Isadore Dyer of New Orleans will discuss "The Left Lower Quadrant Abdominal Mass." Panelists will include Dr.

(Turn to page 26)

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JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
October, 1964, Vol. V, No. 10

ORIGINAL PAPERS

Current Concepts of Immunity

JOEL G. BRUNSON, M.D., THURSTON E. WILKES, JR.,
STEPHEN T. IMRIE, and DAVID A. BALL
Jackson, Mississippi

This paper presents a summary of the evolution of the current concepts of immunity which implicate the human thymus gland as the major mediator of normal growth and development of an immunologically competent state. Methods of suppression of immunologic capability by the administration of adrenal medullary hormones and adrenergic blocking agents, based on an apparent functional relationship between the thymus gland and the adrenal medulla, are described.

APPROXIMATELY 300 YEARS AGO, an anatomist described a small outgrowth of the dorsal cloacal wall in birds, which has subsequently become known as the bursa of Fabricius. The function of this organ remained an enigma until certain studies by Dr. Bruce Glick, now at Mississippi State University, were reported. This investigator reported that bursectomy in chickens was associated with marked impairment of ability to form circulating antibodies.[1] In other studies[2] it was shown that the dipping of fertile eggs in nortestosterone resulted in reduction in size of the bursa and reduced or abolished ability of the subsequently hatched chick to form humoral antibodies. Of perhaps equal significance, this impairment of immunologic capacity was carried over to second and third generations.

There occurs in children a rare disease manifest by ataxia, telangiectasia, and failure of growth. A child with this clinical symptomatology was seen about three years ago by Dr. Robert Good, at the University of Minnesota Hospitals. Review of the literature with reference to this disease revealed the rarity of this "experiment of nature," in that only 17 cases had been reported. Of this number, autopsy findings were described in three cases. In one of these, a statement was made that the thymus gland could not be found at the time of autopsy.[3]

From the Department of Pathology, University of Mississippi School of Medicine.

It should be emphasized at this point that the bursa of Fabricius develops from downgrowths of epithelium from the cloacal mucosa, and that these subsequently differentiate into lymphoid cells, forming what has been referred to as the "cloacal thymus." The morphologic similarity between the bursa of Fabricius and the thymus gland, and the functional studies reported by Dr. Glick, led Dr. Good[4], and others, to initiate studies to determine the functions of the thymus gland.

During this same period, Swiss investigators described another rare disease of children. This disease was associated with marked growth retardation, absence of or marked decrease in serum gamma globulin, and development of profuse, refractory diarrhea of unknown etiology. The dis-

ease has been uniformly fatal by the age of six or seven years. A patient with this Swiss type agammaglobulinemia was also studied by Dr. Good. Autopsy examination showed only a small remnant of thymus gland, an extremely small spleen which lacked normal lymphoid follicles, and marked depletion of cellular elements in lymph nodes and bone marrow.

NEONATAL THYMECTOMY

Thus, by a process of serendipity, several apparently unrelated observations were, in fact, related, and the concept was advanced that the human thymus gland in some manner was associated with growth, and the development of an immunologically competent state. The propounding of this hypothesis has unleashed a torrent of literature, of which space does not permit a detailed review. Suffice it to say, in brief, that thymectomy in certain neonatal species is associated with the development of a runting or wasting syndrome which appears several weeks after the gland has been removed, an impairment of the ability to develop humoral antibodies, and a marked prolongation of survival of homografts.

PERIPHERALIZATION

It is of interest that this procedure in neonatal rabbits or dogs does not result in decreased ability to form antibodies, nor is there prolonged survival of homografts. These observations led to the development of the concept of peripheralization, by which is meant that the thymus gland controls the development of lymphatic follicles, in the spleen, nodes, and other locations. Controversy exists as to whether this process is one of cellular migration from the thymus or whether humoral factors operate.

At any rate, the failure of thymectomy to produce significant alterations in neonatal dogs or rabbits is thought to be due to the fact that peripheralization has already occurred at birth, because of the more mature development of the thymus when these animals are born, compared to its immaturity in rats or mice.

Recently,[5] it has been postulated that, at least in rabbits and dogs, other centers of lymphoid development may, after thymectomy, mature and assume the functions ascribed to the thymus. The developmental and morphologic similarities between the appendix and the bursa of Fabricius has led to the suggestion that the appendix may, in early life, play an important role in development of the immune response.

THE QUESTION OF IMMUNITY

In considering the question of immunity, the problems of transplantation, and the apparent importance of the thymus gland, several facets appear of interest. In the first place, if the thymus acts as a programming center for outlining future growth, and the development of a competent immunologic state, *are* there humoral factors which regulate its function? Although size of an organ may not bear any relation to function, it is known that the thymus enlarges in animals subjected to adrenalectomy, and that its size may be increased in hyperthyroidism, acromegaly, following castration, or in Addison's disease.

While it is possible that these changes may be related to adrenal cortical steroids, other evidence suggests that adrenal medullary hormones may be involved also. In rabbits subjected to drum shock, an intradermal injection of epinephrine results in a local area of ischemia, desiccation, and desquamation.[6] Further, in such animals, in which there almost certainly is an initial increased secretion of adrenal medullary hormones, followed by adrenal exhaustion, an increased susceptibility to infectious organisms such as streptococci or tubercle bacilli has been shown to occur. The response of these animals is not unlike the clinical situation which obtains in Addison's disease, in which there also appears to be an inordinately increased susceptibility to infection, or an inability to handle infectious organisms properly. In rabbits sensitized to horse serum, an intradermal injection of epinephrine, given in association with a challenge intravenous injection of antigen, produces a local hemorrhagic lesion which resembles the Arthus reaction.[7]

Indeed, it was suggested by Gatling[7] that epinephrine might be important in localizing or in producing lesions associated with antigen-antibody complexes. Finally, it should be mentioned that epinephrine is widely used clinically in the therapy of such conditions as anaphylactoid shock, or certain forms of urticaria, diseases probably related to antigen-antibody interactions. It was these considerations that prompted us to investigate the effects of epinephrine in newborn rabbits.

In these studies[8] it was shown that epinephrine, given in increasing doses to newborn rabbits, is rapidly followed by the development of a syndrome characterized by profound failure of

growth, delayed hair growth and opening of the eyes, progressive, severe diarrhea, and a high mortality rate. In conjunction with these alterations, there is rapid, severe involution of the thymus gland, failure of development of lymphatic follicles in the spleen, lymph nodes, and intestinal tract, and cellular depletion of the bone marrow. In this regard there is striking similarity to the conditions which follow neonatal thymectomy. Marked impairment of ability to form circulating antibodies also occurred, but no prolongation of survival of skin homografts could be demonstrated. Indeed, it would appear that such grafts are rejected more promptly in epinephrine tolerant animals than in untreated controls.

A RECONSIDERATION

Such observations lead to a reconsideration of the transplantation problem, and several questions arise: Is the rejection of a graft related to circulating antibodies? Is it related to development of cellular antibodies? Indeed, is it related to antibodies at all? Much controversy exists with reference to the importance of humoral antibodies in graft rejection—most evidence would suggest that such substances play a minor role, if any. With reference to cellular antibodies, no definitive method of measurement exists. Further, although on the basis of all available evidence the rejection of a graft appears to be brought about by antigen-antibody reaction, one must consider the possibility that this might be more coincidental than causal.

That such a statement is heretical goes without saying and perhaps should not be taken seriously. A quotation from Maeterlinck, however, seems appropriate at this point: "At every crossway on the road that leads to the future, each progressive spirit is opposed by a thousand men appointed to guard the past. Let us have no fear lest the fair towers of former days be sufficiently defended. The least that the most timid among us can do is not to add to the immense dead weight which nature drags along."

FURTHER STUDIES

To obtain further information concerning the thymus gland and its apparent functional relationship with the adrenal medulla, other groups of newborn rabbits were given intraperitoneal injections of norepinephrine, in a fashion entirely comparable to those given epinephrine.[9]

In brief summary, these studies indicate that there slowly develops in norepinephrine treated animals a wasting or runting syndrome, coincident with decreased size and cellularity of the thymus gland, and failure of antibody formation following primary, but *not* secondary, antigenic stimulation. Further, although there is retardation of development of the appendix, this organ "escapes" from the effects of the drug and subsequently matures, its maturation coinciding with restoration or acquisition of the ability of the animals to develop humoral antibodies. It is significant in this regard to add that preliminary studies indicate marked prolongation of survival of skin grafts taken from norepinephrine animals and placed on untreated controls.

It thus appears that some significant alteration has occurred within the cellular components of these animals which enables such cells to be accepted by an unrelated recipient. What is the nature of this change? Can it be reproduced in adult animals? Is it possible that humoral antibody function may be related to epinephrine and cellular antibody function related to norepinephrine?

SIGNIFICANT FINDINGS

Although definitive answers to these questions cannot be given at this time, it is significant that the administration of a short acting phenothiazine agent, propiomazine (Largon-Wyeth)—known to be an adrenergic blocking agent—to newborn rabbits is associated with slowly progressive wasting, an inability to form humoral antibodies, and complete nonrecognition of homografted skin.[10] That is, the animal neither receives nor rejects the skin, which apparently is able passively to acquire sufficient nutrition to remain alive for at least a period of a month. In this sense, it would appear that these animals have become so completely detached from reality that they fail to recognize either their own or foreign tissues.

If, however, skin from these animals is grafted to untreated controls, it immediately "wakes up," becomes vascularized, and is accepted by its host for prolonged periods of time.

It would seem, from this evidence, that it may be possible to render donor tissue completely nonreactive, without suppressing the antigenic reactivity of the recipient animal. It is our belief that this approach would be the ultimate insofar as organ transplantation is concerned.

In closing, it is necessary to remind ourselves that much of what has been said is only theory, and subject to considerably more thought and effort. In this regard, a quotation from Darwin seems appropriate: "Many of the views which

have been advanced are highly speculative, and some no doubt will prove erroneous; but I have in every case given the reasons which have led me to one view rather than to another . . . false views, if supported by some evidence, do little harm, for everyone takes a salutory pleasure in proving their falseness; and when this is done, one path toward error is closed and the road to truth is often at the same time opened." ★★★

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Supported by U.S.P.H.S. Grants HE-04579, HE-06943, and GM-382.

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A BARK IS BETTER THAN A BITE

A cocker spaniel taking his morning constitutional stopped to talk to a Russian wolfhound. "How do you like America?" he inquired. "Well," said the wolfhound, "it's nothing like home. In Russia I ate bones dipped in vodka and caviar for breakfast and had my own doghouse made of rare Siberian woods. In Russia I slept on a rug made of thick, warm ermine." "Then why did you come to America?" asked the spaniel. "I like to bark once in a while," said the wolfhound.

Bilateral Ovarian Cysts in a Newborn: A Case Report

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ALTHOUGH CYSTIC OVARIES are found in approximately 25 per cent of newborn female infants examined at autopsy, cysts large enough to be symptomatic are rare. In 1961, Davis[1] reported a case of giant ovarian cyst in a newborn and, from a review of the literature, summarized eight previously reported cases, all of which were unilateral. He emphasized the dictum that abdominal masses in the newborn constitute a surgical emergency and that unnecessary diagnostic tests should be kept to a minimum.

In a review of 16 cases of ovarian tumors and cysts encountered in a ten year period at the Columbus Children's Hospital, Boles et al[2] reported two newborns with large abdominal masses. The first had a large follicular cyst of the left ovary. The second had bilateral huge corpus luteum cysts. The larger cyst (10 cm.) required a left salpingo-oophorectomy; the smaller one (9 cm.) arose from the right ovary and was removed, leaving the ovary. They were unable to find any cases similar to this latter case in the literature.

Karrer and Swenson[3] successfully removed a follicular cyst of the right ovary with torsion of the pedicle, along with the right fallopian tube. This lesion was producing intestinal obstruction in a newborn. This was reported as the earliest successfully treated case of this lesion found in the literature. In their review of 25 cases of ovarian cysts in the newborn and infancy period, they found only one case of bilateral cysts (each measuring 2½ inches in diameter). This was in a 7 months fetus which died at birth.

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Reis and Koop[4] reviewed 25 patients with ovarian tumors treated on the surgical service of the Children's Hospital of Philadelphia between 1947 and 1961. Only one in this series, a 6-day-old infant, had abdominal distention from a unilateral follicular cyst which was removed. The remainder of their cases had cysts along with other complications or had true tumors.

REPORT OF CASE

This white female was born at the Jefferson Davis Memorial Hospital at 8:22 p.m. on Sept. 9, 1963. She was the fourth child of a 36-year-old woman who was healthy and who had an uneventful pregnancy and had received no hormone or drug therapy. Birth weight was 7 lb. 8 oz. When examined on the morning of Sept. 10, 1963, she was found to have a full, doughy abdomen with rounded left lower quadrant and right flank masses. Roentgenograms on Sept. 10, 1963, showed the abdomen to be homogenous throughout, except for a few irregular "bubbles" of gas within the upper small bowel and stomach. No gas was seen in the distal small bowel or colon.

A white female born at Jefferson Davis Memorial Hospital on Sept. 9, 1963, showed symptoms indicative of intestinal obstruction. An initial diagnosis of meconium ileus was ruled out by determination of sweat electrolytes. At laparotomy, bilateral giant follicular cysts of the ovaries were found, a rare condition as shown by the authors' review of the literature.

No intra-abdominal calcifications were seen. A barium enema showed a "collapsed" colon throughout its course. Repeat abdominal films on the morning of Sept. 11, 1963, showed two rounded densities in the lower portion of the abdomen with air in the bowel above these (Figure 1).

Figure 1

A pilocarpine iontophoresis sweat electrolyte test showed a sodium content of 24 mEq. per liter.

Preoperatively, the infant had vomited all feedings, but did pass a small amount of meconium after the barium enema. Laparotomy on Sept. 11, 1963, revealed gigantic bilateral cysts arising from the adnexa uteri and filling the lower abdomen. There was no identifiable ovarian tissue. The cysts were removed intact.

They were examined by Dr. Leo J. Scanlon, pathologist, and were found to be unilocular cystic structures measuring 7 cm. and 4 cm. respectively, with walls of 1 to 2 mm. thickness, and containing watery but hemorrhagic material. On microscopic examination the walls of these cystic structures were lined with granulosa cells. External to the granulosa layer was a moderately well-developed layer of theca interna. In some portions of this cystic ovarian wall were seen small graafian follicles. Many of these were cystic themselves and exhibited loss of the dark staining granulosa cells, leaving a hyperemic thecal layer as the lining membrane. The fibrous layer of the ovary was thinned out, yet present as a supporting membrane external to the lining cells. Diagnosis was bilateral follicular cysts of newborn's ovaries.

Postoperatively, the patient was maintained on intravenous fluids for two days, after which she took her feedings well. She was discharged on her 10th day of life. Her growth and development have been normal, and her weight at age 4½ months was 18 lb.

COMMENTS

Abdominal masses in newborns, especially when accompanied by signs of intestinal obstruction, present a diagnostic problem which is best resolved by early surgical exploration. However, while preparations are being made for operation, there are some procedures which are of value in anticipating the nature of the lesion so as to be better prepared to deal with it. In this case, the initial diagnostic impression was meconium ileus, but the sodium content of sweat obtained by pilocarpine iontophoresis was within normal limits. The value of this test in the preoperative diagnosis of meconium ileus from fibrocystic disease has been documented by Elian, Shwachman, and Hendren.[5]

Bilateral cystic ovaries in a newborn present a problem to the operating surgeon because of the desirability of salvaging any intact ovarian tissue. The endocrine effects of castration are not evident before puberty. External and internal genitalia remain infantile, the breasts do not develop, axillary and pubic hair is scant, and there is no menarche. Epiphyseal closure is delayed and the girls grow tall. Urinary estrogens are absent, pituitary gonadotropins elevated, and 17-ketosteroids normal. Carefully selected endocrine substitution therapy will probably be of value in the case reported.

SUMMARY

This case is reported because of its unusual nature. A newborn with bilateral giant follicular cysts of the ovaries presented a unique condition as revealed from a review of the literature. This infant's presenting symptoms were those of intestinal obstruction which were initially thought to be from meconium ileus. This was excluded by determination of sweat electrolytes. ★★★

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APRÉS VOUS, MONSIEUR!

Consider the plight of poor Henri Mertens, a minor Belgian bureaucrat in the Ministry of Public Works. He won a $100 first prize in a government-sponsored poetry contest with a verse on town planning. Proud of his achievement, Henri mentioned his prize-winning poem during a routine medical examination required of Belgian government employees.

After hearing the poem, the medical board reported that Mertens' mind was unbalanced and that he was no longer fit to hold his public post. Henri appealed the decision to the State Council, Belgium's highest administrative body, which ruled that the medical board had committed a "breach of confidence" and ordered the bureaucrat reinstated.

But the controversy raged on. The State Council liked the poem, so it directed that the psychiatrist on the local medical board be examined by a psychiatrist.

Treatment of Infections with Erythromycin Stearate in Office Practice

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A total of 100 patients, selected on the basis of a clinical impression of bacterial infection, were treated with erythromycin stearate. Results of therapy showed 73 patients were clinically cured, 21 were improved, and 6 failed to respond. The author terms the cure and improvement rate of 94 per cent "excellent" and recommends erythromycin stearate as the antibiotic agent of choice in infections treated in office practice.

MOST PATIENTS with acute infections are seen by a physician before their conditions have progressed to the point of significantly impairing their usual pattern of living. However, the illness or concern of these patients is sufficient to have caused them to seek medical care, and no infection should be regarded casually. Most infections, however, are treated with minimum demand upon the practitioner and with relatively little restriction or inconvenience for the patient.

As the antibiotic armamentarium grows, the physician finds himself with a wide selection of versatile and specialized agents, but he encounters increasing difficulty in choosing one which will be adequate therapeutically and at the same time have minimal side effects. This is especially true when bacterial cultures are not practical.

Erythromycin is a wide-spectrum antibiotic, indicated primarily for the eradication of infections due to gram-positive cocci, including streptococci, staphylococci and pneumococci, which account for the majority of bacterial infections. The buffered stearate salt of erythromycin has been available and in wide use for several years and has enjoyed a superior reputation for safety and effectiveness.

Side effects observed with this preparation have been infrequent and minor. In fact, erythromycin stearate is often used successfully when the employment of other antibiotic agents has produced undesirable side effects or when the causative organism of the infection being treated has become resistant to other antibiotics. After several years of frequent use of the preparation, the study here reported was undertaken to confirm the effectiveness of erythromycin stearate in the treatment of infections commonly encountered in a general office practice.

METHODS

A total of 100 patients, 79 of whom were children, were included in the study. As indicated in Table 1, there were 60 males and 40 females.

Patients were selected on the basis of a clinical impression that they were suffering from an infection of bacterial etiology. Bacterial cultures were not performed.

TABLE 1

PATIENTS UNDER STUDY

Patients	*Males*	*Females*	*Total*
Adults	12	9	21
Children	48	31	79
Total	60	40	100

Multiple diagnoses were recorded for eight patients with the result that 108 clinical diagnoses are listed in Table 2. Erythromycin stearate was

Erythrocin® Filmtab® (erythromycin stearate) is a trademark of Abbott Laboratories, North Chicago, Ill.

given orally, adults receiving a total of 1.0 to 1.5 gm. daily and children receiving not less than 30 mg/kg of body weight per day and not more than 50 mg/kg per day. The medication was usually given in four divided doses daily.

TABLE 2

CLINICAL DIAGNOSES IN THE PATIENTS UNDER STUDY

Diagnoses	*Adults*	*Children*	*Total*
Tonsillitis	3	50	53
Bronchitis	4	4	8
Inflamed throat	2	6	8
Otitis media	0	6	6
Pharyngitis	1	5	6
Cellulitis	3	1	4
Influenza	1	3	4
Trachitis	2	2	4
Rhinitis	0	3	3
Sinusitis	3	0	3
Pneumonia	0	2	2
Prostatitis	2	0	2
Erysipelas	1	0	1
Glossitis	0	1	1
Laryngitis	1	0	1
Mastitis	1	0	1
Pyodermia	0	1	1
Total	24	84	108

RESULTS

The results of therapy are tabulated in Table 3. A total of 73 patients (73 per cent) were clinically cured, 21 (21 per cent) were improved, and 6 (6 per cent) failed to respond to erythromycin therapy. Of the 79 children included in the study, 62 (78 per cent) were clinically cured, 13 (16 per cent) were improved, and 4 (5 per cent) did not respond to treatment. Of the 21 adults, only 2 (9.5 per cent) failed to respond to therapy. Side effects occurred in three children and consisted of mild diarrhea in two cases and a skin eruption in the third. No side effects were reported by any of the adults.

TABLE 3

THE RESPONSE OF THE PATIENTS UNDER STUDY TO ERYTHROMYCIN THERAPY

Patients	*Total*	*Cured*	*Improved*	*Not Improved*
Adults	21	11	8	2
Children	79	62	13	4
Total	100	73	21	6

DISCUSSION

Clinical records of the patients included in the study reveal that the infections treated ranged from moderately severe to severe. Those patients who were improved but not cured were generally the more severely ill. This fact illustrates the importance of initiating antibiotic therapy as early as possible in the course of a bacterial infection. It does not, however, indicate that erythromycin is inadequate therapy for severe infections; many severely ill patients were clinically cured.

The six patients, four children and two adults, who did not respond to erythromycin therapy were subsequently given another antibiotic, usually penicillin, concomitantly with continuing administration of erythromycin. Most of these patients were suffering from severe tonsillitis. In general, however, response to erythromycin therapy alone was extremely satisfactory in patients with this condition, since 53 per cent of the total patients and 63 per cent of the children included in the study had tonsillitis.

The fact that the clinical cure rate was greater in children than in adults is noteworthy, despite the fact that the adult population sample in this study was small. One might speculate that the children's supervised daily routine and diet and their natural capacity to react quickly to treatment were significant factors.

A combined cure and improvement rate of 94 per cent of 100 patients is deemed excellent by this investigator. When the low incidence of side effects is simultaneously considered, it would seem that much of the perplexity in choosing an antibiotic for use in "office" infections is removed. It is the opinion of this investigator that erythromycin stearate is the antibiotic agent of choice for the treatment of most infections encountered in office practice, since it is almost uniformly effective and produces few and minor side effects.

SUMMARY

Erythromycin stearate was used to treat 100 out-patients having 108 clinical diagnoses. No bacterial cultures were performed. Clinical cures or improvement were effected in 94 (94 per cent) of the patients and side effects, occurring in only 3 patients (3 per cent), were minor. Therapy was especially successful in the 79 children included in the study, only 4 (5 per cent) failing to respond to the medication. It is concluded that erythromycin stearate is uniformly effective against most infections encountered in routine office practice, with few and relatively minor side effects. ★★★

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Abdominal Pregnancy

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The incidence of abdominal pregnancy has been reported as anywhere from 1:5,000 to 1:15,000 pregnancies. The author discusses signs and symptoms, diagnosis, and management and reports a case.

ABDOMINAL PREGNANCY is one of the most hazardous conditions in obstetrics. Fortunately it is rare, the incidence being reported anywhere from 1:5,000 to 1:15,000 pregnancies. There are two main classifications of advanced extrauterine pregnancy, primary and secondary. Most cases fall into the secondary group which is the result of tubal abortion and secondary implantation in the peritoneal cavity. Favorite sites of implantation are the posterior aspect of the uterus, the broad ligament, and the sigmoid colon. Primary implantation implies that the sperm has to migrate through the tube and fertilize the ovum in the peritoneal cavity. It is further classified according to site of implantation such as primary ovarian, or primary sigmoid colon.

The peak incidence of abdominal pregnancy is found in the 30-40 age group. Advanced extrauterine pregnancy is 10:1 more common in the colored race. The explanation for this is thought to be due to the high incidence of pelvic inflammatory disease in this race and their delay in seeking medical attention.

SIGNS AND SYMPTOMS

The most common symptom of abdominal pregnancy is abdominal pain which persists throughout pregnancy. This should alert the physician that something is wrong. According to Eastman,[7] many patients complain that the "pregnancy doesn't feel right." Nearly all will have some vaginal bleeding. Gastrointestinal symptoms in the form of nausea and vomiting and signs of intestinal obstructions may be present.

DIAGNOSIS

Due to the rarity of this disorder, diagnosis is difficult. It is more often missed than made, even in large teaching centers. There are many reports in the literature where the diagnosis was made at laparotomy or after several unsuccessful attempts at pitocin induction. There have been attempts to rupture membranes in some cases and an external version was tried on one patient with abdominal pregnancy and transverse lie. The physician must have a high index of suspicion if the diagnosis is to be made early. Some physical findings that aid in diagnosis are: displacement of the cervix anteriorly, palpation of extrauterine mass, small parts of fetus easily palpable on abdominal exam, and fetal heart tones that are easily heard. X-ray findings are: signs of fetal death with exaggerated flexion and contraction, abnormal position of fetus particularly transverse lie, a fetus that is riding high over the pelvis or is in an eccentric position, overlapping of maternal spine by fetal parts on lateral view—Weinberg's sign, intestinal gas pattern in the mid-abdomen behind fetus as reported by Bishop, absence of uterine shadow around fetus.

The two most important aids in diagnosis are hysterosalpingogram and the pitocin test. The hysterosalpingogram is self-explanatory. The pitocin test is performed by either giving pitocin I.M. or by I.V. drip. The uterus will contract if the pregnancy is intrauterine, the extrauterine mass will not. If there is no contraction, the test is highly suggestive of extrauterine pregnancy but is not conclusive as occasionally the uterus will not respond.

DANGER

The most feared complication of abdominal pregnancy is hemorrhage. The next most important is infection. The maternal mortality is

around 15 per cent. Fetal mortality is close to 80 per cent. Congenital deformities of the fetus have been estimated to be from 35-75 per cent.

FATE OF FETUS

There is a small chance for survival if diagnosis is made after viability is reached. After death of fetus, maceration begins early. Infection may take place with skeletonization (fetus being converted into sack of bones). Fistulas (intestinal, abdominal, or vesicle) may form with passage of bones per rectum, bladder, and abdomen. The fetus may calcify with lithopedion formation and may be discovered on x-ray or autopsy years later. Occasionally the fetus will be transformed into a greasy mass—adipocere.

MANAGEMENT

The ideal management is laparotomy with removal of fetus, sac, and placenta. This is not always possible. The problems in management are two, i.e., when to operate and what to do with the placenta. Most authors favor immediate laparotomy as soon as diagnosis is made because of the danger of premature separation of the placenta with hemorrhage and the danger of infection. If the patient is in good condition and the baby viable, some recommend a reasonable delay up until 36-38 weeks in order for a better chance for fetal survival. If the baby is not viable and has recently died, some have recommended waiting three-six weeks for placental thrombosis with decrease in vascularity.

PLACENTA

The placenta should be left in situ if attached to vital organs. The operator should not be too vigorous in exploring the abdomen at the time of surgery for fear of producing hemorrhage. The excess fetal sac should be excised and the cord ligated close to the placenta. The abdomen is closed without drainage unless suppuration has already taken place. Adequate blood, at least 2,000 cc., should be available at the time of surgery in case of hemorrhage. If bleeding is encountered accidentally, it may be controlled with pressure on abdominal aorta or by tamponading the area with wet laps. These may be brought out through the incision or left in the abdomen to be removed later.

FATE OF PLACENTA

Most placentas left in situ will be absorbed; however, it may take up to two years for this to be completed. Infection of the placenta with abscess formation is common and will have to be drained abdominally or by colpotomy. Cyst formation of the placenta will occasionally take place and some authors recommend leaving the umbilical cord untied to prevent this complication. The placenta may calcify and have to be removed. Weinberg has shown by endocrine assays of urine chorionic gonadotropin that the placenta may continue to be active for as long as 54 days.

SUMMARY

1. Abdominal pregnancy still remains one of the hazards of obstetrics.
2. The most important sign and symptom of advanced extrauterine pregnancy is vaginal bleeding and abdominal pain.
3. Diagnosis is difficult.
4. Most authors favor immediate laparotomy as soon as diagnosis is made.
5. Adequate blood, at least 2,000 cc., should be on hand for surgery.
6. The placenta should be left in situ if attached to vital organs.
7. The abdomen should be closed without drainage.
8. Most placentas left in situ will absorb; however, infection and and abscess formation are common and may require drainage.

CASE PRESENTATION

A 34-year-old colored female, gravida 11, para 10, nonclinic patient was admitted to the labor unit of Confederate Memorial Hospital on April 30, 1963, because of vaginal bleeding, abdominal pain, nausea, and vomiting. She stated she had not felt fetal movement for the past three weeks. Her last menstrual period was Sept. 10, 1962, and her expected date of confinement was June 17, 1963. Her past menstrual history showed no serious illnesses and no operations. She had 10 living children, all delivered at home by a midwife with no complications.

On physical examination the patient appeared chronically ill. Her blood pressure was 160/100, temperature 98.6, and pulse 104. Heart and lungs were negative. On abdominal examination the uterus was thought to be the size of a 7 month pregnancy and no fetal heart tones were heard. Fundal height was 28 cm., and the abdomen was slightly distended. Bowel sounds were hypoactive, with tenderness to palpation in the right upper quadrant.

The patient was not thought to be in labor and was worked up as a bleeder. A vaginal examination was performed, and the cervix was found to be long and closed. She was then put to bed on the labor unit for observation. Over the

next one and one half hours the patient's condition deteriorated with increase in distention and continued vomiting. Intravenous fluids were given and a Levin tube was passed with a large amount of bile-stained fluid being removed by suction. Abdominal films were ordered which confirmed fetal death and showed evidence of intestinal obstruction on the erect film.

A laparotomy was performed and a large extrauterine pregnancy was found with the fetus and placenta enclosed in a fibrotic sac in the region of the left fallopian tube. The uterus was small and pushed down in the right lower quadrant by the mass. There were many adhesions of the intestines and omentum to the extrauterine mass. A total abdominal hysterectomy and left salpingo-oophorectomy was performed. The patient's postoperative course was uneventful. The fetus weighed 2,150 gm. ★★★

500 G E. Woodrow Wilson

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GREAT EXPECTATIONS

A postal clerk in a small town thought he was doing the young man a favor when he sold him 200 special issue four cent stamps in the new conservation series: whooping cranes with their young. However, the customer returned a short time later, thrust the stamps through the window and asked for the regular kind. "These just won't do," he said, "we're sending out wedding invitations and my fiancée says the cranes look too much like storks!"

Clinicopathological Conference LVII

Winston County Community Hospital
Louisville, Mississippi

THIS PATIENT was an 8-year-old colored male who was admitted to the Winston County Community Hospital at 3:30 p.m. on Feb. 9, 1964. At the time of admission he was having convulsive seizures. The blood pressure was approximately 180/100. He was treated with sodium luminal for convulsions and given oxygen and Mercuhydrin. An admission urinalysis was insufficient for measurement of the specific gravity. There was a one plus albuminuria. On microscopical examination there were five to ten white blood cells and "many red blood cells" per high power field. The initial blood work showed a red blood count of 2,650,000 with 7 gm. of hemoglobin. The white blood count was 14,900 with 84 per cent segmented neutrophils and 16 per cent lymphocytes. A later urinalysis recorded a three plus albuminuria with red blood cells too numerous too count. A nonprotein nitrogen determination was 77 and a blood urea nitrogen 65 mg. per cent.

In spite of continued supportive therapy and treatment including peritoneal dialysis, death occurred at 8:25 p.m. on Feb. 11, 1964.

The total length of his illness was around seven-ten days. It apparently began with an upper respiratory infection. It is interesting to note that there were two siblings affected at the same time with a similar condition. (Further information regarding both the patient under discussion and the two siblings is recorded in the clinical discussion.)

CLINICAL DISCUSSION

Dr. D. T. Wilson: "As I understood from the informants, the patient had been sick approximately three weeks prior to the time of admission rather than seven-ten days as recorded in the brief summary. The upper respiratory infection was apparently mild in nature. Generalized swelling and edema developed and became progressively worse. We were unable to get any information regarding the color of his urine. The only treatment during this time was half an aspirin tablet occasionally. He was not confined strictly to bed and got up to play some every day, even on the day prior to admission to the hospital. He was not brought to the hospital until convulsions developed."

The patient in CPC LVII is an 8-year-old colored male—one of three brothers with symptoms indicative of acute glomerulonephritis. The patient under discussion died after a short period of hospitalization during which he was treated with sodium luminal for convulsions, peritoneal dialysis, and given oxygen, Mercuhydrin, and one unit of blood. The other two brothers had uneventful recoveries. Discussers are Drs. D. T. Wilson and Dewitt Crawford. Dr. Kenneth Heard gives the autopsy report.

Dr. Dewitt Crawford: "When was the first convulsion?"

Dr. Wilson: "At around 11 a.m. on the admission date. He was admitted at 3 p.m. after having had several convulsions. The convulsions were rather easily controlled, but he became progressively anuric. Other facts not recorded in the summary were that he had a normal electrocardiogram and that he received one unit of blood during the short period of hospitalization prior to death. Our clinical impression was that this patient had acute glomerulonephritis, but because of the fact that two other siblings had a similar illness, some type of poisoning should be excluded.

"The fact that three children in the same family apparently had the same illness—probably acute

glomerulonephritis—was to me the most interesting feature of this case. I shall briefly summarize the clinical stories of the other two patients.

"The second patient, case no. 13831, was admitted to the hospital on the date the patient under discussion died. He was a 10-year-old half-brother. About ten days prior to admission he developed a slight cold and cough which persisted to the admission date. About three days before admission he began to develop some edema and had slight fever. He also was treated at home with home remedies and was not brought in until after the death of his brother. In addition to the symptoms noted, he had had headache for about four days.

"On physical examination he appeared opisthotonic. There was rather marked generalized edema, including the face and periorbital regions. Physical examination was otherwise negative except for crackling rales in both bases posteriorly. Urinalysis showed one plus albuminuria, with 5-10 WBC/HPF, numerous red blood cells, and occasional granular casts. Total peripheral white blood count was 8,050 with 58 per cent segmented neutrophils, 30 per cent lymphocytes, and 3 per cent monocytes. The hemoglobin was 9.5 gm. and the hematocrit 29. On the following day his blood urea nitrogen was 22.5 and the serum electrolytes were normal. A urinalysis four days later showed essentially similar changes. An ASO titer during this period was 125 Todd units. His blood pressure on admission was 180/120. Although he had one convulsion shortly after admission, improvement was rapid and convalesence smooth. On subsequent office visits following discharge the urine was negative and the blood pressure normal.

"The third brother, case no. 13833, was brought to the office for a check-up because of the preceding chain of events. He was asymptomatic and not edematous, but a urine specimen was "loaded." On admission to the hospital, his blood pressure was 122/80, respirations 20 and temperature 98.6° F. His hemoglobin was 10 gm. and the hematocrit 30. Urinalysis showed two plus albumin with many red blood cells and granular casts. His physical examination was negative. A repeat urinalysis three days later showed approximately the same findings. The urine had largely cleared at the time of discharge and was completely negative on subsequent office visits. He remained asymptomatic. Incidentally, his ASO titer was 166 Todd units."

PATHOLOGICAL DISCUSSION

Dr. Kenneth M. Heard: "In addition to the peripheral edema there was 500 cc. of fluid in the peritoneal cavity and about 400 cc. in the left pleural cavity, the right pleural cavity being obliterated by old adhesions. The lungs were heavy, congested and edematous, the right weighing 300 gm. and the left 180 gm. Each kidney weighed 100 gm. and did not appear too unusual grossly. The capsule of each stripped with ease, leaving rather pale, grayish-pink surfaces. (The body had been arterially embalmed.) There was slight congestion of the stellate vessels on the surface. On transverse section, the cut surfaces bulged slightly over the cut edge of the capsule. The cortex averaged 0.6 cm. in thickness bilaterally, and there was some diminution in the cortical striations. No petechiae were apparent. Certainly, the diagnosis of acute glomerulonephritis could not be made grossly. Another important gross finding was that of pronounced cerebral congestion, swelling, and edema.

"The noteworthy microscopical findings were in relation to the kidneys. Here the outstanding

Figure 1. Bloodless glomeruli showing extreme cellularity due to infiltration by reactive cells.

changes were in the glomeruli. Quoting from the microscopical description in the autopsy protocol: 'The glomerular tufts are quite large and prominent, bloodless, and extremely cellular. The increase in cellularity is due to infiltration throughout the glomeruli of inflammatory cells, principally polymorphonulcear neutrophils, but also with occasional macrophages. There is no apparent pronounced thickening of the capillary basement membranes. The glomerular spaces are generally empty, but occasionally one contains a small amount of fibrin. Epithelial proliferation is

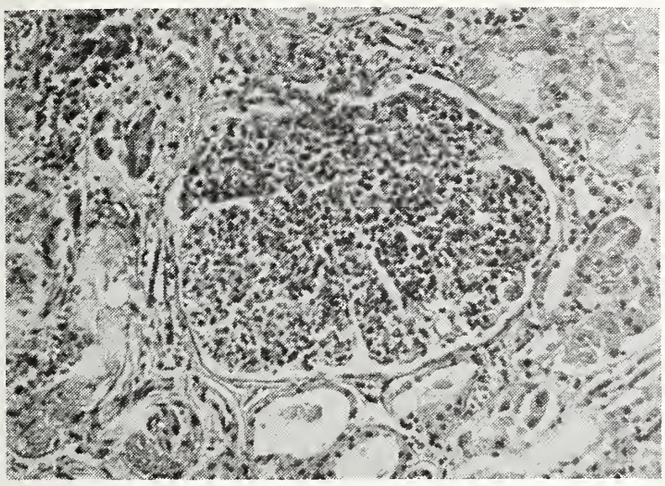

Figure 2. High power view of affected glomerulus.

apparent in scattered glomeruli, but this is focal and no crescents are formed. Adhesions between the capillary tuft and the capsular epithelium are occasionally noted. The epithelium of the proximal and distal convoluted tubules appears moderately swollen and in some zones show hyaline droplet degeneration. Interstitial congestion is most pronounced in the medulla.' Toxicological examination carried out by the state chemist was negative.

"There are two chief points of interest in regard to this case. First, is the relatively rarity of death from acute glomerulonephritis. The estimated mortality rate used to be in the neighborhood of 5 to 10 per cent. In hospitalized patients it is thought now to be more likely in the neighborhood of 1 to 2 per cent. It is in those cases where treatment is delayed, such as this one, that death occurs. I believe our case was probably irreversible at the time of admission to the hospital. Incidentally, I think two things—alone or in combination—accounted for the immediate cause of death in this case. These were pulmonary edema and cerebral edema and swelling. Of the two, I think that the latter was probably more important.

"The second point, and the thing that fascinated me most, was the occurrence in three siblings at the same time. This has been reported in the literature from time to time but still is a relatively rare occurrence. Some of the references are appended at the end of this report.[1-6]

"Also in perusing the literature, I found that sporadically the disease has occurred in almost 'epidemic' form in isolated instances. This happened in a small community in Minnesota—Red Lake, I believe.[1] In discussing this with Dr. David Richardson before this meeting, he reminded me that there was an outbreak in Macon, Miss., about five years ago, involving some 120 cases. (N.B. Macon is the county seat of Noxubee County which adjoins Winston County to the east.)"

FINAL DIAGNOSES

1. Acute exudative glomerulonephritis (fatality in one of three siblings affected simultaneously)
2. Uremia (clinical)
3. Generalized anasarca
4. Cerebral congestion and edema
5. Ascites
6. Pleural effusion, left ★★★

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PALLIATIVE PANACEA

Alfred Hitchcock, master of the whodunnit and psychochiller, says there's a medical application of Russian roulette. All the players, he contends, should have headaches. The revolver is loaded with the usual one cartridge and five aspirin tablets. No matter how a player comes out, the headache should be cured.

Radiologic Seminar XXX: Gastric Diverticula

C. D. BOUCHILLON, M.D.
Laurel, Mississippi

DIVERTICULA, WHILE COMMON in the duodenum and colon, are rather rare in the stomach. Most frequently, a gastric diverticulum is an incidental finding on a GI series and assumed to be innocuous. Occasionally, however, they will be symptomatic and require treatment.

Figure 1. A typically placed and appearing gastric diverticulum, located high up on the lesser curvature aspect of the stomach close to the insertion of the esophagus.

Descriptively, there are two types. First, the true (probably congenital) diverticulum contains all layers of the stomach wall, averages in size from 2.0 to 4.0 cm., has a varied sized neck, and is almost always located high on the lesser curvature aspect of the stomach just below the entrance of the esophagus. The false (acquired) diverticulum, either of a traction or pulsion type, is the result of inflammatory disease or trauma in or adjacent to the stomach which weakens the wall and produces the out-pouching.

Gastric diverticula may be found at any age but are more frequently seen in middle-aged females. They are usually a concomitant finding along with disease of the stomach, gall bladder, pancreas, or liver which has necessitated the GI study. Occasionally, however, the diverticulum is

Figure 2. A close-up view of the same diverticulum, from a spot film, showing the neck and contour of the diverticulum to better advantage.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Jones County Community Hospital.

clinically significant. Inflammation, distention, bleeding, gangrene, and perforation have been reported. Atopic pancreatic tissue is occasionally found in its wall, supporting the congenital theory of origin. In 148 cases collected by Palmer, complaints were epigastric or lower chest pain 50 per cent, vague dyspepsia 35 per cent, vomiting (sometimes with undigested food) 5 per cent, dysphasia rarely, and massive hemorrhage in a few cases.

Diagnosis depends upon radiographic demonstration of the pouch. Sometimes, in those with narrow necks, it is difficult to fill the pouch with barium, and for that reason they are occasionally

Figure 3. An unusually large gastric diverticulum, measuring 4 by 6 cm. in diameter. Note again the well-defined neck.

missed on a GI study. By varied fluoroscopic positioning of the patient, however, the pouch can usually be filled. In the upright position the diverticulum may show air fluid levels, sometimes with a double level of stomach secretions and retained food, and with the heavy barium forming the bottom layer. Frequently, this barium may remain in the diverticulum for several days. The diverticulum may rarely be shown on routine abdominal films as a round, air-pocket near the cardiac orifice.

In the absence of clear-cut symptoms, gastric diverticula should be left alone. If, however, there is adequate clinical evidence that the diverticulum is clinically significant, the treatment of choice is surgical resection. Bigg and Judd recently reviewed 29 operative cases of gastric diverticulum at Mayo Clinic over a period of 50 years which were not

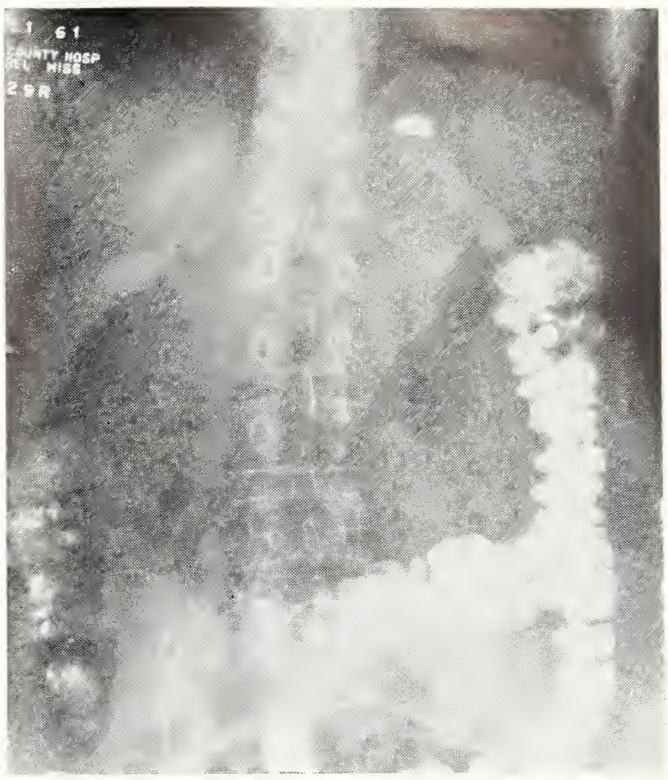

Figure 4. Retained barium in a gastric diverticulum following a GI series. Some air is also present. Occasionally, the diagnosis can be suspected on plain films of the abdomen when sufficient air is trapped in the lumen of the diverticulum.

associated with any other GI disease. Massive hemorrhage had occurred in 4 cases. Microscopically, the vast majority were negative on pathological sections. Fifteen of these patients were cured of their symptoms by surgery. These authors concluded, "No relationship was apparent between histologic appearance, the severity of the symptoms, and operative relief." They speculated that ulceration within a true diverticulum, like other types of gastric ulcer, heals quickly with medical treatment and thus, might not be found later at elective surgery.

In summary, a gastrointestinal study should include sufficient positioning to demonstrate a gastric diverticulum that might be present. In the clinical evaluation, every other likely cause of a patient's symptoms should be excluded before the gastric diverticulum is incriminated. ★★★

3318 Franklin Ave.

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The President Speaking

'HOPE for All'

OMAR SIMMONS, M.D.
Newton, Mississippi

A HIGH IMPACT national educational program on health care for the aging will be initiated within the week by American medicine. With AMA exercising leadership in a vital role of coordination, each state medical association will participate. In a nutshell, this positive program will concentrate on the simple point that private medicine has done, can do, and will do more for the aging that any possible governmental program under compulsion, including Social Security. Where the genuinely indigent are involved, the educational effort will emphasize the total desirability of local control of local programs which reach no higher than state government.

This public education program will be conducted during October. It is nonpartisan, but there is no denying that its message will relate to the ongoing campaign. What clearly disassociates this project from partisan politics is its content and message: It is nothing more than American medicine has been stressing all along since the first Wagner-Murray-Dingell bill in 1944. We must logically expect proponents of compulsory care to rent their clothing and gnash their teeth, loudly proclaiming that physicians are raising this issue as though it were the first time. This, if done, will be a transparent misstatement and should be treated as such.

The program will make use of legitimate communications media, including newspaper advertising, television, radio, speakers, and mailings. The theme will be HOPE, our way of abbreviating Health Opportunity Program for the Elderly. It will be a maximum effort, and every citizen has a valid stake in its success. Never before has the American system of private medical care been so desperately in jeopardy, and never before have American physicians had a greater responsibility to their patients than they have in joining actively in this necessary and worthy crusade. ★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume V, Number 10

October 1964

'Emergencies' in Our Emergency Rooms

I

THE RAPIDLY EXPANDING use of hospital emergency rooms by the general public, along with decreasing availability of personnel to staff these departments, has given rise in recent years to misunderstanding in many of our communities as to the purpose of this service." Thus has the Mississippi Hospital Association, through its president, Paul J. Pryor of Jackson, laid a valid medical care problem squarely on the line. The statement is timely, pertinent, and refreshingly candid. Many will agree that the appeal is something sorely in need of being said and that it is addressed to the honest proposition of improving the manner in which medical care can and should be provided.

The hospital association's statement points out that the 50-year-old concept of the hospital "accident room" which was intended for initial care of injuries and acute emergencies has evolved into an emergency department of the modern hospital. But, unfortunately, many in the medical care consuming community have improperly regarded such a facility as a sort of medical center for all types of care. Backing up this assertion, Mr. Pryor offers an array of convincing facts: In just two decades since the end of World War II, the number of emergency admissions has zoomed 500 per cent, but the number of accident patients seen in hospital emergency rooms has remained relatively stable and constant.

Continues the statement: "This has come about largely because the emergency rooms of our hospitals are often misused by persons who consider them outpatient clinics or a substitute for a family physician. Headaches, sore throats, colds, runny noses—all of these appear frequently on emergency room charts. And all are symptoms which properly should be seen by the person's private physician in his office or clinic." A statement, it should be added, to which many a doctor of medicine who has been called in the early hours of a Sunday morning to examine a condition first manifested on the preceding Wednesday can say a hearty amen.

II

The forcefully constructed utterance of the hospital association makes another valid point: "Hospitals are not legally authorized to administer any treatment except by order of a physician. Moreover, these improper uses of the emergency room contribute to overloading this department and reduce its efficiency for treating those in need of immediate attention for serious emergencies." In the real crux of the appeal, the hospital association puts it in plain language: "Although hospitals maintain equipment and treatment facilities, they are not licensed to practice medicine." Mr. Pryor frankly admonishes the public "when at all possible, that the family physician be notified. . . ."

The hospital association makes a strong case for the very existence of the emergency room, that of providing a suitable clinical climate where the physician can treat those acutely in need of medical attention. Despite new and extensive additions to hospitals, these facilities are designed and intended for meeting these needs and not for basic medical care convenience in treatment of conditions which are patently postponable in the true emergency context.

III

Concludes the statement: "Efficient care and attention for the emergency patient is one of the most important services performed by your hospital. The Mississippi Hospital Association points out that it can perform this function more effectively if you will first notify both the hospital and your family physician . . . before you go to the hospital."

Let all who recognize the value of the community hospital's investment in facilities for care of those in acute need give support to this enlightened, but possibly unpopular position, which our hospital association has had the courage to assume.—R.B.K.

Whirlybirds in Your Hospital's Future

The Flying Physicians Association, a fraternity of M.D.'s interested in private flying, has recently made a strong case for hospital heliports. Writing in the association's publication, *The Flying Physician,* J. R. Howard, assistant director of the Vertical Life Aircraft Council of Washington, an arm of the Aerospace Industries Association, calls attention to life-saving services performed by helicopters in transporting the ill and injured from remote sites to medical care facilities.

Points out the author of these dramatic examples: "If any of these (accident) victims had been transported to the hospital by boat or pack horse and then finally by ambulance, it is doubtful if they would be alive today. But when accidents occur in our cities and suburbs, ambulances lose life-saving minutes as they buck the traffic-clogged highways, freeways, and city streets—not to mention the apprehension of the victim as the ambulance careens around corners with the siren screaming."

When a study committee worked with the University of Mississippi School of Medicine and Hospital a few years ago in connection with the state Building Commission's conveying a suitable parcel of land to the college trustees, prominent mention was made of a possible future need for a heliport. At the Ochsner Foundation Hospital in New Orleans, a lighted heliport is situated on the grounds. California's Santa Monica Hospital boasts a rooftop landing pad for the whirlybirds, as does the Methodist Hospital at Arcadia, Calif.

Howard argues that he's not advocating a heliport for every hospital but he believes that no new facility should be built without one in its plans. Military medicine proved during the Korean War that deaths from battle casualties could be dramatically reduced by using helicopters to transport the wounded from the battlefield directly to major medical facilities. And the helicopter is no longer a county fair curiosity; it is a safe aerial workhorse with a future in better medical care.—R.B.K.

Shorter Life? But Look at Grandpa!

Biostatisticians say that they can't be sure, but the longevity cycle may be undergoing a slight reversal. During the past two full calendar years, 1962 and 1963, Americans have lived shorter lives. More important, a progressively briefer life span showed up in overall mortality totals. While a couple of swallows don't make a summer, they seldom make an appearance before spring.

Reliable actuaries report the average life expectancy at birth in the United States during 1879-1894 as being a fleeting 34.0 years. By the roaring 20's, it was breaking the 55 barrier and zoomed up to 63.4 when World War II erupted. At mid-century in 1950, an infant at birth could look forward to 68.3 years, and the high point was hit in 1961 with 70.8 years. Then came the down trend: 1962 reflected 70.7, and 1963 dropped to 70.5 years. Although made from a sampling of life insurance policy holders, the trend is pronounced as being valid for a composite of both sexes.

But the same studies offer a bright side, too. The computers click and blink out the fact that an American male who is presently 65 years old can look forward—statistically, that is—to another 12.2 years of life, and his wife of equal age will outlive him 3.3 years. And most folks ought to have little complaint about two-tenths of a year above age 70 when they think of the odds against grandpa.—R.B.K.

Book Reviews

Pediatric Therapy. By Harry C. Shirkey, M.D., Director, The Children's Hospital of Birmingham, Associate Professor of Pediatrics, Medical College of Alabama, Birmingham, Professor of Pharmacology, Howard College, Birmingham. 1st edition. 1144 pages with illustrations. St. Louis: The C. V. Mosby Company, 1964. $16.50.

"Pediatric therapy is not a twig of the tree of general therapy. Rather, it is a discipline unto itself, emancipated as far as possible from the disciplines and dogmatism of general or adult therapy." With these words in the preface, Dr. Harry Shirkey, a pediatrician with special training and interest in pharmacology, introduces a very comprehensive study of treatment of infants and children. Twenty-six of its 96 chapters were authored at least in part by Dr. Shirkey himself, and his philosophy of "the specific treatment for the specific disease in the specific child" permeates the entire book.

It is rare indeed to find in a book of this size an author who can convey real excitement to the reader. But this Dr. Shirkey does. He writes in an easily readable style, even including humorous touches, and especially in the chapters on Drug Treatment (Part 1) draws such a picture of artistry in the administration of drugs to children that it is truly inspiring.

Each chapter by Dr. Shirkey and his 70 contributors is written in the same general plan. Each writer outlines the most accepted method (as employed by himself) for the treatment of the disease about which he is writing and follows it with a group of references that will enable the practicing pediatrician to read widely and well about a therapy in which he is involved or interested.

Of particular advantage to the practicing physician are the tables placed handily on different paper in the back of the book. These are: Table of Dosages, a listing of average dosages for all drugs used in the book; a West Nomogram for estimation of surface areas to be used in the dosages of infants and children; and a graph giving the relation between body weight in pounds, body surface area, and adult dosage. The Table of Dosages has the brand names of each drug it lists—a great help to the practitioner—as well as the dosages, side effects, and the sizes and forms in which it is supplied. The Table of Dosages alone would make the book valuable to a busy doctor.

Most important, the busy doctor is impressed anew with the fact that the therapy of infants and children is an art—a "possible" art, not something esoteric or mysterious, but interesting, important, and worth his best efforts.

For leisurely reading or for quick reference this is an excellent book. This reviewer has made quick reference to it many times in his daily practice in the short time he has had it and looks forward to much more help in the future. It is highly recommended for anyone, pediatrician, general practitioner, or surgeon, who is involved in the treatment of children.

L. G. Horn, M.D.

Principles of Public Health Administration. 4th edition. By John J. Hanlon, M.D., Director of Community Health Services, City of Philadelphia; Professor and Chairman, Department of Preventive Medicine and Public Health, Temple University School of Medicine, Philadelphia, Pa. 719 pages with illustrations. St. Louis: The C. V. Mosby Company, 1964. $11.50.

The comprehensive new edition of this excellent, well-established text is the fourth in the dozen years since this book first appeared. We are indebted to Dr. Hanlon for continuing to provide us with a better understanding of what is happening in public health today. The book is well organized continuing the format of the previous edition with four parts consisting of Introduction, Administrative Considerations in Public Health, Pattern of Public Health Activities in the United States, and the Future. In this new edition the author has made certain data and concepts more current and has stressed the "public" in public health.

Single authorship by one of the nation's outstanding administrators and teachers of public health provides a wealth of basic and practical information for the public health administrator and student. Dr. Hanlon is well qualified by experience as a public health administrator from the

local to the international level and as a teacher he has been able to transfer his ability in the classroom and field to the printed page.

This text remains the best all-round book for the student and the public health administrator. The private practitioner will also find chapters of this book of interest in helping him to see what the physician's role is in this important phase of medicine. Especially recommended are the following chapters: (1) The philosophy of public health; (24) addictive diseases; (25) chronic diseases and adult health; (30) public health, the private physician, and medical care; (31) the voluntary health agencies; and (32) the past as prologue.

R. L. WYATT, M.D.

Saunders Announces Recent Publications

W. B. Saunders Company features the following new books in their full page advertisement appearing elsewhere in this issue:

DOCTOR'S EASACCOUNT RECORD SYSTEM

New!—A financial record keeping system tailored specifically to the requirements of physicians.

HUGHES—PEDIATRIC PROCEDURES

New!—Step-by-step instructions on scores of management procedures for child patients.

BATES AND CHRISTIE—RESPIRATORY FUNCTION IN DISEASE

New!—A valuable aid in managing those patients suffering from lung conditions.

A. V. BEACHAM of Magnolia was one of 16 appointees named by Governor Paul B. Johnson to the Research and Development Council.

WILLIAM D. COPELAND of Sandersville; JAMES V. CRABB of Booneville; CLAUDE CROMEANS of Belmont; CARL W. NORWOOD of Corinth, and CLYDE RUFF of Tomnolen received Golden "T" certificates at the Sept. 20 commencement of the University of Tennessee Medical Units recognizing their 50 years of medical service.

KENNETH D. DRAPER has been named health director of DeSoto, Tate, and Tunica Counties. Dr. Draper is a graduate of the University of Tennessee Medical Units. He completed a three year tour of duty with the United States Air Force in June.

THOMAS L. KILGORE, JR., of Jackson, has received an appointment as resident in cardiovascular and thoracic surgery and clinical instructor at the Baylor University Affiliated Hospitals in Houston, Texas. Notification of the appointment, which is effective July 1, 1965, came from Dr. Michael E. DeBakey, professor and chairman, department of surgery, Baylor University College of Medicine.

HERBERT H. ROBINSON of Pascagoula has announced the association of DEWEY H. LANE in the practice of general surgery.

GREEN, ELISHA J., Chalybeate. M.D., College of Physicians and Surgeons, Memphis, Tenn., 1910; died Aug. 15, 1964, aged 85.

MCGEHEE, JAMES CLAUDE, Bude. M.D., Memphis Hospital Medical College, Tenn., 1912; received certificate from the University of Tennessee College of Medicine, Memphis, for 50 years of medical service; died Aug. 17, 1964, aged 77.

MESSINA, AURELIO PASCAL, Vicksburg. M.D., Tulane University School of Medicine, New Orleans, La., 1944; interned Charity Hospital of Louisiana, New Orleans, one year; residency, Charity Hospital of Louisiana, New Orleans, one year; member, American Academy of General Practice, the American College of Physicians, and Southern Medical Association; died Aug. 23, 1964, aged 47.

STROUD, WILLIAM FLETCHER, Mt. Olive. M.D., Memphis Hospital Medical College, Tenn., 1903; interned Vicksburg Hospital, Miss.; died Aug. 10, 1964, aged 88.

AMA–State Society Partnership Will Sponsor 'HOPE' Program in October

A massive national education program on health care of the aging will be initiated during October by the American Medical Association and a partnership of its 54 constituent state organizations. The nonpolitical, multipronged effort will make use of newspapers, magazines, television, radio, speakers, and direct mailings. Program emphasis is aimed at support of existing private and public health care plans under state and local control with medical orientation.

The AMA Board of Trustees has designated the education endeavor HOPE, an acrostic of health opportunity program for the elderly. Institutional advertising, stressing the superiority and propriety of locally controlled programs over compulsory federal medical care under Social Security, will be aimed at securing 542 million home exposures during the month.

In Mississippi, the state medical association, under supervision of the Board of Trustees, will direct the newspaper campaign during the second and third weeks of October. Simultaneously, AMA will publish full page ads in major national magazines and sponsor TV and radio spots on the ABC, CBS, and NBC. Refusing at first to make time available, the networks were reported as having accepted time orders as this issue went to press.

The program is expected to peak with presentation of a 30 minute TV network program in late October. Stress will again be placed, AMA spokesmen assert, on positive aspects of locally sponsored health care plans which are supported by state medical associations. Examples are the State Hospital Commission, charity hospital, and Kerr-Mills programs in Mississippi.

Playing leading roles nationally will be Drs. Donovan F. Ward of Dubuque, Iowa, recent successor to the AMA presidency following the death of Dr. Norman A. Welch of Boston, and Edward R. Annis of Miami, immediate past president. Extensive use will be made of nationally known physician speakers, including other AMA officers and trustees as well as state medical association leaders.

Newly produced pamphlets and literature items will be available upon request to members for distribution to patients, community leadership, and others. Posters and ad reprints will also be available.

MSMA's Board of Trustees approved participation by the association in the HOPE program and has urged member physicians to lend local support. Giving added emphasis to this appeal, Dr. Omar Simmons of Newton, MSMA president, is devoting his monthly message in this issue of the JOURNAL to the effort.

Dr. Simmons said that component medical societies desiring speakers for local meetings or civic clubs should communicate with the association's executive offices at Jackson. He revealed that preliminary plans call for publication of the institutional-type message on HOPE in as many as 50 Mississippi daily and weekly newspapers.

Late reports indicated that spot announcements would be presented over most if not all Mississippi network-affiliated television stations. The radio spots will be broadcast for the most part over the clear channel stations of maximum power. National printed media now scheduled for carrying the AMA-sponsored messages are *U. S. News and World Report, Wall Street Journal, TV Guide, Time,* and *Newsweek.* AMA's public education monthly, *Today's Health,* will also carry this message.

The entire effort will be confined to the month of October, the announcement said. Based on tested communications principles, the HOPE message will reach every American in his home a minimum of three times, and expected adult exposure may run as high as 12 times.

Drs. Annis and Long Head U.S. Section of ICS

During a Sept. 9-12 meeting in Chicago, Dr. Edward R. Annis of Miami, Fla. was installed as president of the United States Section, International College of Surgeons, and Dr. Lawrence W. Long of Jackson was installed as vice president.

Dr. Annis is the immediate past president of the American Medical Association. Dr. Long, a MSMA past president, was also elected to the National Council of the U. S. section and to the Council's Executive Committee.

As vice chairman of the General Surgery Section, Dr. Long will work with Dr. Philip Thorek of Chicago, program chairman of the General Surgery Section in preparing the program for the Las Vegas meeting of the North American Federation of ICS, which is set for April 25-29, 1965. Dr. Long said that speakers already scheduled for the section's program include Sir Dennis Browne and Lawrence Abel of London and Prof. Dr. Komei Nagayama of Japan, president of ICS.

SMA Section Announces 1964 Program

The Section of Ophthalmology of the Southern Medical Association has completed the program for its annual meeting Nov. 16-19 in Memphis, Tenn.

Dr. Albert C. Esposito of Huntington, W. Va., chairman, has announced that the guest of honor and guest speaker for this year's session will be Dr. Harold F. Falls, associate professor of ophthalmology at the University of Michigan School of Medicine, Ann Arbor, Mich.

The first day's session under the supervision of Dr. Philip M. Lewis, the vice-chairman, will include live television of cataract and muscle surgery with surgery by Drs. Ralph S. Hamilton, J. Wesley McKinney, and Daniel F. Fisher and a panel composed of Drs. William B. Clark, Louis J. Girard, and DuPont Guerry, III. Scientific papers concerning retinal detachment surgery, tonometry, and neuro-ophthalmology will also be presented.

The other sessions will include papers on retinal disease and surgery, photocoagulation, cryosurgery, keratoplasty, and fundus lesions.

Hotel reservations are still available. For further information, contact Dr. George S. Ellis, Secretary, Section of Ophthalmology, 812 Maison Blanche Building, New Orleans 16, La.

UMC Adds Nine To Faculty

Classes resumed at the University of Mississippi School of Medicine Sept. 2 with nine new faculty members bringing the full-time teaching staff to a new high of 91.

Newly named to the Medical Center faculty by the Board of Trustees of the Institutions of Higher Learning are five assistant professors and four instructors, spread through seven departments.

New assistant professors in the department of surgery are Dr. Hilary H. Timmis, just out of two years in the Air Force, and Dr. Edward M. Lowicki, coming from Wadsworth General Hospital in Los Angeles. Dr. Timmis is a graduate of Wayne State College of Medicine and completed his internship and residency training at the University of Pennsylvania. Dr. Lowicki is a Johns Hopkins graduate, interned and did his residency at the University of Virginia Medical Center where he earned an M.S. in surgery in 1960.

An oncologist, Dr. Paul A. Morse, Jr., has joined the department of microbiology as an assistant professor. He holds a Ph.D. from the University of Wisconsin where he has been a postdoctoral fellow.

Assistant professors of physiology-biophysics are Dr. Aubrey Taylor and Dr. Elvin E. Smith, both Ph.D. recipients in the June UMC Commencement. Dr. Ben Douglas, who also received his Ph.D. from the Medical Center in June, has been named an instructor in medicine (research) with an overlapping appointment in physiology-biophysics.

Newly appointed an instructor in radiology after having completed his specialty training at the Medical Center is Dr. Melvin Flowers, a Tulane graduate. A graduate of the Louisiana State University School of Medicine, Dr. William J. Erwin has been appointed an instructor in psychiatry. He interned at Confederate Memorial at Shreveport, and served his residency at Charity Hospital, New Orleans, and the University of

Virginia Medical Center. Dr. James E. Jackson, new instructor in neurosurgery, is recently out of the Air Force after getting his M.D. and completing his training at Duke.

Dr. Robert Q. Marston, University Medical Center director, welcomed a record 159 new students to the health complex campus at orientation Sept. 1. Enrolled in three schools, medicine, nursing, and graduate, the group includes 81 freshmen medical students, 34 freshmen and seven transfer sophomore nursing students, 32 incoming graduate students, and five beginning medical technologists.

One of the medical school freshmen is a part-time student. The class, which includes three women, comes from 19 schools and seven states.

$700 Million Paid in 1963 For Surgical Benefits

In 1963, insurance companies paid out nearly $700 million in benefits to insured persons to help them pay for the cost of surgery, according to the Health Insurance Institute.

The $695,000,000 in surgical benefits was an increase of 10.6 per cent over the $629,000,000 paid out by insurance companies in 1962. The payments included all benefits under surgical expense policies and those benefits under major medical insurance policies that went toward surgical bills.

At the end of 1963, 85 million persons had surgical expense insurance through insurance companies. Blue Cross, Blue Shield, and similar groups covered 52.5 million persons for surgery, and other health care groups protected 8.6 million. After deducting persons protected by more than one type of insuring organization, there was a net total of 134.9 million persons with surgical insurance, compared to 131.2 million persons a year earlier.

Over 145 million persons had hospital insurance at the end of 1963 which means that 93 per cent of persons with health insurance have both hospital and surgical insurance. Coverage by insurance companies increased from 82 million persons in 1962 to 85 million in 1963, a boost of 3.6 per cent, while benefits increased 10.6 per cent in the same period.

A comparison of a longer period, from 1958 to 1963, shows that surgical benefits increased nearly two and one-half times as fast as the number of persons covered by surgical insurance. In the five years, the coverage went from a little over 69 million to 85 million, an increase of 22.9 per cent, while benefits climbed from $446 million to $695 million for an increase of 55.7 per cent.

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1964 Is Epidemic Year For Rubella

The latest figures released by the National Disease and Therapeutic Index (N. D. T. I.), a nationwide survey of private medical practice, shows visits for German measles reached epidemic proportions in the first six months of 1964.

N. D. T. I., which measures the number of patient-physician contacts involving various diagnoses, estimated physicians received over 1.8 million visits for rubella since January of this year. This represents almost a 500 per cent increase over the same period last year. Historically, the first half of the year accounts for the largest share of rubella visits.

A regional break of N. D. T. I. information shows that 1964 rubella visits were higher than average in the East, particularly in the New England and Middle Atlantic states. The Eastern half of the country usually accounts for 25 per cent of all visits to private practitioners; rubella visits showed 36 per cent in this region.

N. D. T. I. further reported that an age breakdown on German measle visits showed that the epidemic was confined almost entirely to children and teen-agers with only about one fifth of the visits being accounted for by adults. The sex breakdown for rubella was about average with females accounting for approximately 60 per cent of the visits to private physicians.

NEW MEMBERS

The following physician has been elected to membership by his respective component medical society in the Mississippi State Medical Association and the American Medical Association:

MOORE, DANIEL HOUSTON, JR., Meridian. Born Meridian, Miss., July 25, 1934; M.D., Harvard Medical School, Boston, Mass., 1959; interned University of Mississippi School of Medicine, Jackson, one year; residency, Cincinnati General Hospital, Ohio, and postgraduate work at Harvard Medical School, Boston, Mass.; elected Aug. 4, 1964, by East Mississippi Medical Society.

State Morbidity Reported Through Sept. 4

The Mississippi State Board of Health reports the following occurrence of morbidity for 1964 through the 36th week of the year, ending Sept. 4, 1964. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	682
Tuberculosis, O.F.	161
Salmonella infections	31
Brucellosis	2
Encephalitis, infectious	19
Typhoid Fever	2
Dysentery	
Bacillary	50
Amoebic	10
Dysentery, N.O.S.	2
Food Poisoning, N.O.S.	1
Diphtheria	3
Septicemia, Staph.	16
Septicemia of newborn	1
Diarrhea of newborn	1
Septicemia, N.O.S.	9
Meningococcal infection	22
Meningitis, O.F.	31
Gastro-enteritis	1
Tularemia	5
Mononucleosis, infectious	54
Toxoplasmosis	1
Hepatitis, infectious	170
Hepatitis, serum	1
Tetanus	3
Helminthic infections	
Hookworm	825
Ascariasis	239
Strongyloides	50
Histoplasmosis	14
Sepsis, puerperal	2
Rheumatic fever	2
Moniliasis	1
Adenovirus	1
Mycotic, N.O.S.	1
Other inf. and parasitic diseases	1
Streptococcus infections	
Scarlet fever	121
Strep throat	2,499
Taeniasis	8
Pertussis	108
Measles	6,686
Chickenpox	1,049
Mumps	912
Other Cestode Infestations	7
Influenza	363
Gonorrhea	3,745
Syphilis	
Early	331
Late	114

AUXILIARY

SMA Auxiliary Sets 1964 Meet

The 1964 annual meeting of the Woman's Auxiliary to the Southern Medical Association is scheduled for Nov. 16-19 at the Hotel Claridge in Memphis.

The Monday, Nov. 16, program will include registration, a Board breakfast, and a luncheon and tour of Plough, Inc. Tuesday's agenda features the general session of the 40th annual meeting and a boat ride on the "Memphis Queen."

The Wednesday schedule begins with a Post Board breakfast and includes the Doctors' Day luncheon.

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ACS MEET / Continued

Isadore A. Siegel of Baltimore; Dr. Joseph W. Kelso of Oklahoma City, and Dr. Keith S. Grimson of Durham, N. C.

Papers to be read at the thoracic section meeting also set for Tuesday, Jan. 26, will include "Aortic Valve Replacement" by Dr. Dwight E. Harkin of Boston, "Mitral Valve Replacement" by Dr. Dwight C. McGoon of Rochester, Minn.; "Pacemakers: Types, Indications and Technique of Insertion," by Dr. James W. Pate of Memphis; "Sutureless Prosthetic Heart Valves: Technique and Clinical Experiences" by Dr. George J. Magovern of Pittsburgh; "Hiatal Hernia and Associated Abnormalities" by Dr. Will C. Sealy of Durham, N. C., and "Esophageal Replacement" by Dr. William E. Neville of Cleveland.

Panel discussions during the thoracic meeting will consider "Cancer of the Lung," and "Thoracic and Thoracoabdominal Injuries."

Papers scheduled for Wednesday, Jan. 27, are "Management of Polyps of the Colon and Rectum" by Dr. William H. Moretz, of Augusta; "Treatment of Thermal Burns" by Dr. J. D. Martin, Jr., of Atlanta, and "Renal Disease Simulating Abdominal Pathology" by Dr. David W. Goddard of Daytona Beach.

Wednesday panel discussions will be on "Septic Shock," and "Tumors of the Lower Extremity." Moderators and panelists include Drs. Richard T. Meyers of Winston-Salem; Hugh Trout, Jr., of Roanoke; Brannon T. Hubbard, Jr., of Montgomery; Robert Lynch of New Orleans; Wood W. Lovell of Atlanta; Lemuel Bowden of New York; Richard D. Brasfield of New York; John T. Godwin of Atlanta.

Further information may be secured from the Public Relations Department, American College of Surgeons, 40 East Erie Street, Chicago 11, Ill.

Disability Insurance Sets Record High

More than 47 million American wage earners have some type of formal insurance arrangement which protects them against income loss when they are disabled, according to the Health Insurance Institute.

(Turn to page 28)

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Bronchopneumonia	192	179
Empyema	12	11
Pneumonia, lobar	150	146
Pneumonia, other febrile	160	150
Various infected pneumopathies	192	172
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INSURANCE / Continued

According to the Institute's tabulations, at the end of 1963 a total of 46,956,000 employees were protected against loss-of-income either through insurance company programs, or through other plans. The Institute estimates that 47,500,000 were so insured as of June 1, 1964.

Insurance companies insured 34,956,000 of the total in 1963 and paid a record $936 million in benefits—$30 million more than was paid during the previous year. This means that in 1963, insured persons received an average of $2.6 million a day in loss of income benefits. These payments did not include benefits made under accidental death and dismemberment coverages.

Twelve million other workers were protected in 1963 against the loss of income by formal paid sick leave plans. These included: civilian government service plans which protected over seven million employees; private industrial plans which covered 3.8 million workers; and union-administered sick leave plans which protected over one-half million wage earners as did plans under the sponsorship of employee mutual benefit associations.

In addition to these formal types of disability plans, millions of others were protected under informal type income protection programs.

Benefits paid through insurance company loss of income policies are rising more than four times as fast as the number of persons covered by such policies, the Institute said.

In 1948, some $246 million was paid out by insurance companies to help replace income lost through disability. The growth of $936 million in 1963 represents an increase of 280 per cent. In the same period of time, loss of income coverage provided by insurance companies has climbed from 21 million to 35 million workers, for an increase of 69 per cent.

Of the employees in the study who were protected by loss of income policies, 93 per cent had short-term disability benefits, and 7 per cent had long-term coverage which provided benefits for five or more years for accident and illness.

Of the employees with short-term coverage, 72 per cent were eligible to receive benefits for up to

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MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Meeting, Nov. 29-Dec. 2, 1964, Bal Harbour, Fla. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn, Chicago 10, Ill.

American College of Surgeons, Clinical Congress, Oct. 5-9, 1964, Chicago. Samuel P. Harbison, Secretary, 40 East Erie, Chicago 11, Ill.

International College of Surgeons, North American Federation, April 25-29, 1965, Las Vegas, Nev. Mr. Stanley Henwood, Executive Director, 1516 Lake Shore Dr., Chicago 60610.

Southern Medical Association, Nov. 16-19, 1964, Memphis, Tenn. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 10-13, 1965, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday January, First Wednesday March, May, July, September, November. Charles D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March, June, September, and December. William E. Riecken, Jr., P. O. Box 831, Kosciusko, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday April and October, Oxford. Vernon B. Harrison, P. O. Box 36, University, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucius Olen Crosby Memorial Hospital, Picayune, Secretary.

South Central Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.

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Articles for Publication

Manuscripts should be typewritten, double spaced on one side of the paper. Tables, charts, and tabulations should be submitted on separate sheets but their position in the text should be indicated. Authors are encouraged to limit bibliographies to 10 references, written in conformation to style utilized in scientific publications of the American Medical Association. Articles are accepted for publication on the condition that they have not been previously published and are contributed solely to this JOURNAL.

A thesis summary of 75 to 100 words must accompany each manuscript separately from the text. Figures and drawings are acceptable when prepared with black ink on white paper. Photographs for illustrations should be unmounted, untrimmed, glossy prints and all such material must be identified. No charges are made to authors for illustration engravings not exceeding four column inches per printed page.

Reprints may be obtained at cost from the association. The right is reserved to decline any manuscript for publication. Ordinarily, manuscripts submitted will be acknowledged whether published or not.

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INSURANCE / Continued

26 weeks; 26 per cent had benefits for 13 weeks, and 2 per cent could receive benefits for up to 52 weeks.

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Maximum income replacement benefits available to disabled employees ranged from under $25 a week, to over $85 a week.

Southeastern Internists Schedule October Meeting

The American College of Physicians (ACP) will hold a regional meeting for internists in the Southeastern United States, Oct. 16-17, 1964. The meeting will be held at the Fort Sumter Hotel, Charleston, S. C.

The Southeastern meeting is one of 27 scientific seminars sponsored each year by the ACP throughout the United States and Canada. It serves to help keep College members in Alabama, Florida, Georgia, Louisiana, Mississippi, and South Carolina abreast of developments in the basic sciences and clinical medicine. The ACP represents more than 12,700 specialists in internal medicine and related fields.

During the morning scientific sessions, topics will include a clinical evaluation of frozen blood, pericardial disease and hormone metabolism.

Dr. Thomas M. Durant of Philadelphia, Pa., ACP President and professor and chairman of the Department of Medicine at Temple University, will address the physicians Friday morning. He will also give a scientific presentation on "Problems in the Diagnosis of Pericardial Disease."

Dr. Dale Groom of Charleston, is chairman of the committee on arrangements. Dr. Kelly T. McKee, also of Charleston, is chairman of the scientific program committee.

19th Cancer Research Symposium Scheduled

"Developmental and Metabolic Control Mechanisms and Neoplasia" will be the subject of the 19th Annual Symposium on Fundamental Cancer Research, scheduled for March 4, 5, and 6, 1965, at the University of Texas M. D. Anderson Hospital and Tumor Institute, Houston, Texas. Scientists from the United States and abroad will present papers on the latest developments in cancer research.

Dr. Darrell N. Ward, head of the department of biochemistry and chairman of the 13-member symposium committee at M. D. Anderson Hospital, has announced that the topics under discussion at the symposium will be: biosynthesis and control mechanisms; molecular basis of early development; molecular basis of later development and control; and comparative studies on control mechanisms in normal and neoplastic tissues. Each of the sessions in the three-day symposium will be followed by a discussion period. The symposium is co-sponsored by the University of Texas Graduate School of Biomedical Sciences at Houston.

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Volume V
Number 11
November 1964

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The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, $5 per annum; $1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

November 1964

Dear Doctor:

Despite the scheduled hike in Social Security taxes on January 1, the fedicare defeat still saved taxpayers uncounted billions. Hidden away in the Senate-passed version was increase in taxable wage base to $5,600 from present $4,800 annually. New 1965 rate is 8.25 per cent, a whopping $396 per year, even on the lesser base.

> Cruelty of economic deception in fedicare is second only to misrepresentation of services it ostensibly offers. Proponents unctuously talk of keeping tax under 10 per cent while raising wage base in every new version. Next bill will have new gimmick of housing loans for aging, "fedishelter."

The days of the GP drug investigator are numbered, if FDA medical director J. F. Sadusk has his way about it. Speaking in Los Angeles last month, he said that "use of the general doctor...in testing drugs in his office in the midst of a busy practice is probably coming to an end." New drug amendments to FDA laws give agency almost life-and-death sayso over medicinals.

Protest and outrage have characterized reactions in medical quarters over a drug industrialist co-chairing Johnson-Humphrey efforts. At least one state medical association - Arizona, appropriately enough - formally expressed its "surprise and confusion" over role of Merck's John T. Connor. Consensus is that any citizen may vote as he likes but that Connor, as a drug maker, was nipping at friendly hands.

Eleven new research grants totaling over $504,000 have been made by AMA-ERF to investigators studying the tobacco-health problem. Biggest award went to Italy's Nobel laureate, Prof. Daniel Bovet. Since inception of research program, criticized by some because money came from tobacco industry, over $1 million has been awarded.

Local medical societies and hospital staff groups in Mississippi will be participating in Diabetes Detection Week November 15-21. Medically-led sponsoring organization, American Diabetes Association, 18 E. 48th St., N.Y. 10017, will furnish kits and information on request.

Sincerely,

Rowland B. Kennedy
Executive Secretary

AMA-ERF

AMA, APA Denounce 'Fact' Magazine Smear Of Goldwater

Chicago - AMA president Donovan F. Ward called the Fact Magazine article on Sen. Barry Goldwater "an exercise in yellow journalism and scientific irresponsibility." Story purports to evaluate Goldwater's psychological fitness for presidency. Because psychiatrists were polled on idea, American Psychiatric Association joined in denunciation. Fact publisher, Ralph Ginzburg, was once convicted of sending obscene matter through mails and sentenced to five years in prison.

ACIR Extends Crash Injury Studies To Trucks

Buffalo, N.Y. - Cornell's Automotive Crash Injury Research unit, which has identified leading causes of injury and death in passenger car accidents, will expand its work into the trucking field. With support of American Trucking Association, ACIR has initiated studies of 127 fleets with 26 already reporting one or more accident. Investigators say small body of data does not yet permit quantitative evaluation of injury-producing phenomena.

'Every Time' Generic Name Regulation Is Quashed By Court

Washington - FDA regulations requiring drug makers to state the generic name of a preparation with every appearance of the brand name have been held invalid by a federal court. Action was brought by pharmaceutical manufacturers because of expense and hardship, and court held that FDA requirement was inconsistent with labeling laws. The "every time" rule was especially burdensome in ethical advertising.

Pilot Fitness Is Subject Of New Study

Chicago - The Industrial Medical Association has published a new guide, "Medical Aspects of Business Aviation," which raises serious questions on corporate pilot fitness under current examination practices. Study shows that 30 per cent of all nonmilitary aviation is business-related and that pilots are often on duty with acute or chronic disorders which, if diagnosed, might disqualify them temporarily or permanently. IMA advocates occupational health examinations in addition to FAA minimum standards checkup.

Poll Shows Growing Understanding Of Radiology

Wilmington, Del. - A DuPont study, just released, shows that more than a third of the public can identify the function of a radiologist and that awareness of the specialty is growing. Although 57 per cent of respondents had never heard of a radiologist, a substantial group which had never been x-rayed replied correctly. American College of Radiology has long conducted public education on the specialty.

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
November 1964, Vol. V, No. 11

Congenital Hypertrophic Pyloric Stenosis: A Report of Two Neonatal Cases

SAM L. ROBINSON, M.D.; CHARLES R. GILLESPIE, M.D., and
EDWIN H. COLE, M.D.
Laurel, Mississippi

This report reviews the diagnosis and treatment of congenital hypertrophic pyloric stenosis. Two cases are discussed in which the diagnosis of congenital hypertrophic pyloric stenosis was made in the first week of life, one baby undergoing pyloromyotomy on the fifth day and the other on the second day. While it is unusual to encounter definite symptoms in the newborn period, these two cases illustrate the necessity of including the diagnosis of hypertrophic pyloric stenosis in the differential diagnosis of high intestinal obstruction in the newborn.

THE PURPOSE of this report is to review briefly the diagnosis and treatment of congenital hypertrophic pyloric stenosis and to call to the attention of the clinician the fact that occasionally this condition can be present in the immediate neonatal period. Standard textbooks usually date the onset of symptoms during the third week of life and not before the ninth day of life. Two cases of congenital hypertrophic pyloric stenosis have recently been encountered in the newborn nursery at the South Mississippi Charity Hospital. Both babies vomited all feedings in the nursery and were treated surgically, one undergoing surgery on the fifth day and the other on the second day of life. Review of the literature failed to disclose similar cases of diagnosis and pyloromyotomy at this early age.

CASE NO. 1

B. R., a white male (mother: gravida II, para II), was born on Feb. 19, 1963, the product of a normal term pregnancy. He weighed 8 pounds, 10 ounces. Cry and respirations were spontaneous. Five hours after birth and before starting oral feedings, the baby vomited. During the first 12 hours he had a large meconium stool. Glucose solution oral feedings were started after 12 hours. Vomiting occurred after each feeding. On the second day antispasmodics (initially Elixir of Donnatal, later parenteral atropine) were started without change in symptoms. X-ray examination of the abdomen after instillation of Lipiodol into the stomach revealed prolonged gastric stasis without dilatation of the stomach.

During the third day the vomiting was noted to be projectile. Feedings were then discontinued for 24 hours, hydration being maintained by parenteral fluid administration. Upon resuming feedings, projectile vomiting immediately recurred. Bile was never noted in the vomitus. Physical ex-

From the Departments of General and Thoracic Surgery and Pediatrics, South Mississippi Charity Hospital.

amination was within normal limits. A palpable "olive" was diligently sought for by three examiners but could not be felt. On the fifth day of life, laparotomy was performed revealing the presence of congenital hypertrophic pyloric stenosis. Pylorotomy was performed. The postoperative course was completely uneventful, the infant retaining all feedings without vomiting. He was discharged on the fourth postoperative day. When last seen at age nine months, he was continuing to gain weight normally without further episodes of vomiting.

CASE NO. 2

G. C., a Negro female (mother: gravida VIII, para VIII), was born on Oct. 2, 1963, the product of a normal term pregnancy. She weighed seven pounds. Cry and respirations were spontaneous. During the first seven hours the baby vomited once and had a meconium stool. Feedings were then started and were followed by immediate projectile vomiting. Bile was never noted in the vomitus. Gastrointestinal series using Lipiodol revealed only prolonged gastric emptying. Physical examination was within normal limits except for mild distention of the upper abdomen. No masses could be palpated abdominally. Thirty-six hours after birth, an exploratory laparotomy was performed revealing congenital hypertrophic pyloric stenosis. Pyloromyotomy was performed with uneventful recovery. When last seen at 2½ months of age, she continued to gain weight without further episodes of vomiting.

DISCUSSION

According to Gross,[1] hypertrophic pyloric stenosis is the most common condition requiring surgical therapy in infancy. The symptoms are all indicative of high intestinal obstruction and of a serious loss of body fluids and electrolytes, especially hydrochloric acid. Vomiting seldom occurs before the child is two weeks of age.

The majority of patients are seen during the fourth week of life. Vomiting, usually projectile with a visible peristaltic wave, and failure to gain weight despite eager nursing, are usually the primary symptoms. An abdominal mass (or "olive") can frequently be palpated.[2] Roentgenologic examination is not necessary in the usual case. Gross[1] estimates the number of cases requiring x-ray study to be only 5 per cent. A roentgenogram of the abdomen without contrast medium will often show a large, dilated, gas-filled stomach, with relatively little gas in the intestine beyond the pylorus. A gastrointestinal examination using contrast medium may not always prove the diagnosis, even in the presence of all the signs and symptoms, and thus may prove misleading. Actually, if the diagnosis can be proved clinically, roentgenograms are unnecessary, reserving x-rays only for those atypical cases. On occasion, only the diagnosis of high intestinal obstruction can be made, the differential diagnosis being hypertrophic pyloric stenosis, duodenal stenosis, annular pancreas, or malrotation. All of these conditions require operative intervention for cure, making a specific etiological diagnosis unnecessary.

In 1908 Fredet introduced an operation which consisted of splitting the hypertrophied pyloric muscle in a longitudinal fashion, without opening the mucosa, and then suturing the muscle in a transverse direction. In 1912 Ramstedt[4] described the operation which is now universally employed in treatment of pyloric stenosis in babies. It consists of splitting the hypertrophied circular muscle longitudinally, but not incising the mucosa. The mucosa is allowed to pout out into the slit in the muscle. No attempt is made to cover over the muscular defect. The obstruction is quickly and completely relieved. One must be careful to completely divide all of the circular muscle mass in order to effect a cure. The critical point from a technical aspect is at the lower margin, where the duodenal mucosa may be inadvertently opened. Should this occur, the mucosa can be closed effectively with a chromic catgut suture of 4-0 or 5-0 on an atraumatic needle. Feedings should be withheld for 24 hours while the stomach is kept empty by Levin suction. Feedings may then be started without danger. The Fredet-Ramstedt procedure markedly reduced the mortality, and with modern improvements in correction of existing fluid and electrolyte deficiences, the mortality should be less than 1 per cent. Prior to this, gastrojejunostomy was the surgical treatment for congenital pyloric stenosis. The mortality was usually well above 50 per cent.

There is no satisfactory explanation for the etiology of congenital hypertrophic stenosis of the pylorus. It has been likened to neurological disturbances such as megacolon without evidence to either support or condemn such a theory. Some pediatricians regard pyloric stenosis as the end result of a pre-existing pyloric spasm. While this theory might be attractive, it does not appear to be entirely plausible because pyloric hypertrophy can be found so early in life that spasm could not have pre-existed for any appreciable length of time. Gross[1] states that the problem of etiology is one of only academic interest, which is far over-

shadowed by practical considerations of the surgical treatment.

CONCLUSIONS

We feel that hypertrophic pyloric stenosis is a dynamic condition rather than a static state, that it is present at birth, though not usually to such a degree to allow the diagnosis, and as the hypertrophy increases the symptoms progress. The rapidity of the hypertrophy thus determines the age at which the diagnosis is made and definitive surgical treatment performed. While it is unusual to encounter definite symptoms in the newborn period, these two cases illustrate the necessity of including the diagnosis of hypertrophic pyloric stenosis in the differential diagnosis of high intestinal obstruction in the newborn.

SUMMARY

1. Two cases of congenital hypertrophic pyloric stenosis occurring in the immediate newborn period are presented with pyloromyotomy being performed on the second and fifth day of life.

2. The diagnosis and treatment of congenital hypertrophic pyloric stenosis is discussed.

3. Attention is called to the fact that congenital hypertrophic pyloric stenosis can cause symptoms while the infant is still in the newborn nursery.

★★★

432 South Thirteenth St. (Dr. Robinson)

Authors' note: Since the preparation of this manuscript, a white male premature infant, weighing four pounds, one ounce, at birth, underwent pyloromyotomy for congenital hypertrophic pyloric stenosis on the fifth day of life, bringing the total number of cases diagnosed and treated in the newborn nursery to three.

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Rx? IT'S WONDERFUL!

The following "tall tale" about a physician's penmanship appeared in Jimmy Ward's "Covering the Crossroad" column in the *Jackson Daily News*. Mr. Ward credited Dr. J. H. Fox of Jackson with finding and sending in the story which originated at Saint Elizabeth Hospital, Dayton, Ohio.

A forgetful patient went to the doctor for a check-up. The doctor wrote out a prescription to him in his usual illegible writing. The patient put it in his card-case and forgot to have it filled.

Every morning for two years he showed it to the conductor as a railroad pass. Twice it got him into Radio City Music Hall, once into the baseball park, and once into the symphony. He got a raise from the cashier by showing it as a note from the boss.

One day he mislaid it at home and his daughter picked it up, played it on the piano, and won a scholarship to a conservatory of music.

Psychological and Emotional Aspects of Geriatric Care

G. W. GREEN, JR., M.D.
Benoit, Miss.

SINCE ABOUT 1900, persons in the age category 65 and over have increased in number 400 per cent.[1] Today, in the United States, there are over 16 million men and women who have passed their 65th birthday. Of this 16 million who qualify as senior citizens, approximately 20 to 25 per cent, or about four million, present problems of emotional maladjustment, and 5 to 8 per cent are so severely disturbed that they require institutional care.[2] Thus, approximately three million patients in this age group alone, needing emotional help, are under the care of general practitioners and specialists. Certainly, as the proportion of practice occupied by elderly men and women so steadily increases, it becomes more and more necessary for physicians to take a closer look at the special problems involved in their care.

In order to analyze the psychological and emotional aspects of aging, a suitable classification of these conditions is necessary. In searching the available literature on this subject, most of the classifying data boiled down to one word, *depression,* with its various sequelae. So-called senile behavior often proves to be a definite, treatable illness, simple depression.[3] Results of several well-conducted research projects give undeniable strength to the growing theory that a large part of senile behavior is not an inevitable consequence of aging itself but is due to various degrees of depressive reaction. Dr. Robert N. Butler, writing in the February 1963 issue of *The American Journal of Psychiatry,*[3] reports on a study conducted by 21 investigators from several specialties. Using various means of testing, the group concluded that chronological age did not differ between the senile behavior group and the well-adjusted or normal aging group. Cerebral blood flow and oxygen consumption showed no significant differences between a group of normal young subjects and the group of elderly men. Where differences did occur, they were found in subjects with evidence of arteriosclerosis.

Read before the 80th semi-annual meeting, Delta Medical Society, Greenwood, Oct. 9, 1963.

Twenty to 25 per cent of persons over 65 are affected by noticeable emotional disturbances of which depression is the commonest. The author discusses cause, prevention, and treatment of these disturbances.

If it is accepted that psychological and emotional factors have a sizeable influence on the over 65 age group, then it is pertinent to look at the environment of older people and list the most probable causes of these disturbances.

1. The first factor is **Loss of Self-Esteem.**[4] Enforced retirement and gradual deterioration of physical and mental abilities bring about a loss of usefulness and purposefulness. This often brings about depressive reactions.

2. Depression often occurs as a result of **Physical Illness.** It may appear quite suddenly following an illness or it may develop slowly during a prolonged convalescence.

3. **Grief Reactions**, such as follow the loss of a marital partner or close friend, do not resolve themselves as rapidly or as completely as at a younger age.

4. **Financial Insecurity** must be considered as an important contributing factor to emotional problems. Inability or failure to make preparation for adequate retirement income, rising costs of living, and additional expenses incurred in later

years,[5] often bring about hardships which lead to withdrawal and depression.

5. **Loneliness** also takes its toll in emotional reactions. Loss of family ties, friends, and occupational associations sometimes lead to isolation and resulting depressive reactions.

These five factors, along with other conflicts that may arise in any individual situation, and the ever-present, magnifying effect of too much idle time to sit and think and worry, present a fertile field for the development of depressive reactions.

It goes without saying that, if physicians are going to help these individuals, they must first recognize their depression or tendency toward depression as early as possible. Diagnosing depression in the elderly patient presents no special problems. The usual symptoms of depression at any age include:[6]

1. Depressed appearance.
2. Altered voice, slow, monotonous speech with volume lowered.
3. Feeling of depression. If you suspect it, ask the patient. The admission often gives relief.
4. Anorexia and sometimes weight loss.
5. Insomnia, which is often intractable to ordinary sedatives.
6. Numerous, vague physical complaints, often of a "draggy" feeling with backache, fatigue, muscular and joint pains, or weakness.
7. Tendency to avoid social contacts.
8. Morning despondency, with some improvement later in the day.
9. Untidiness, with decreasing concern about personal hygiene.
10. Some difficulty in mental activities, with such complaints as "I can't seem to collect my thoughts" or, "I can't keep my attention on anything."

These are symptoms of frank depression. On the other hand, there are signs by which an observant clinician may foresee a depression before it actually occurs. One type of individual so inclined is described as a rigid, compulsive, selfish, seemingly independent person who keeps his interests and activities in limited areas. Another personality type prone to depression is on the other extreme, that is, the self-denying individual, too respectful of the emotional needs of others to the neglect of his own.

One other comment should be made in regard to diagnosis of depression. The physician may not recognize depression in the elderly because of his own good relationship with the patient. His visit, in itself, is a source of satisfaction to the patient and may provide momentary relief. Therefore, because the patient is cheerful at the time of the visit, this should not lead the physician to discredit the opinion of the nurse or the family that the patient is becoming depressed.

In considering treatment of simple depression, the importance of preventive measures should be emphasized. What should be considered when the physician has opportunity to counsel his adult patient in regard to preparation for his declining years? The patient should be encouraged to

1. maintain or regain good physical health,
2. train and exercise his mind, to diversify his interests, and to develop hobbies,
3. keep up associations with younger people,
4. learn to delegate authority and unload responsibility on younger shoulders in order to make his transition gradual,
5. keep in touch with old friends and make new ones,
6. cultivate equanimity and develop a flexible personality in order to deal comfortably with his fellow man,
7. cultivate a congenial home environment,
8. make all preparations possible for lifelong economic security,
9. develop the habit of looking forward. Planning for tomorrow is a continuous task and one that produces contentment and usefulness.

Achieving this in every person is impossible, but, having such goals in mind, the physician can use his counseling influence on a patient of any age to help him prepare adequately for retirement and old age.

In the absence of adequate preventive measures, psychological and emotional disturbances do occur and the physician must institute a program of active treatment. Some important features of active treatment are:

1. **Attention to overall physical health.** Physical examinations should be at more frequent intervals than in younger people. This is because of the insidious nature of many of the ailments of advanced age and because of the profound effect of physical illness on emotional balance. Particular attention should be given to the nutritional state of the elderly patient. They are prone to neglect good dietary habits, especially if they are in strained financial condition. Elderly persons, especially women, are particularly prone to participate in so-called "food fads."

2. **Attention to the patient's home environment.** Sometimes well-meaning children, in attempting to care for an emotionally disturbed parent, are operating in a framework of ignorance and can't handle various problems because they don't know how. The physician can serve by helping them to find the reasons for the patient's de-

pressive symptoms, and advising corrective measures. In the process of family counseling, the physician may find that the home is definitely and unchangeably hostile toward the patient. In such cases, it becomes the duty of the physician to recommend a change of environment for the patient. This may be found in the home of another relative, in one of our very efficient nursing homes, or in a hospital. By the same token, a nursing home situation may cause hostility in the patient and call for alterations or even removal of the patient to a more acceptable environment.

3. **Providing physical, mental, and social outlets.** Here we need the close cooperation of the family and any local recreational programs and social agencies. Group psychotherapy is especially valuable where it is available. Place them in situations where there are people and where there is activity. Give them things to do, people to watch, work to accomplish. Do what you can and with any means at hand to prevent their withdrawal and self-isolation.

4. **Use of drugs.** The physician must be aware of over-enthusiastic treatment of insomnia which so frequently accompanies depression in older patients. Many common sedatives, particularly barbiturates, give poor relief and may cause toxic reactions. Phenothiazines or other tranquilizers are often more effective than sedatives. Sometimes an aspirin tablet at bedtime helps relieve minor discomforts which can interfere with sleep.

In reference to anti-depressant drugs, let me say that these are useful and every physician should be familiar with them but they are to depression what aspirin is to a headache; that is, temporary relief only. The real treatment is in the removal of the causes.

SUMMARY

1. Twenty to 25 per cent of over 65 age citizens are affected by noticeable emotional disturbances. By far the most frequent disturbance is simple depression and its sequelae.

2. Depression is preventable to a great extent by adequate preparation for retirement years, by continued mental and physical activity, by a tranquil home environment, and by a good doctor-patient relationship.

3. Depression is treatable within the scope of the family physician by searching, finding, and eliminating the causative factors in the patient's environment. ★★★

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UNPUBLISHED REMARKS

A doctor addressing a gathering told reporters that as he was making the same speech the following week in a neighboring town, he did not wish to have anything published. The following day he was horrified to read in the local paper:

"Dr. Smith delivered an excellent lecture—he told some wonderful stories—unfortunately they cannot be published."

Practical Aspects of Cardiac Catheterization

ISAAC A. NEWTON, M.D.
Greenville, Miss.

With the many technical advances in cardiac surgery, cardiac catheterization has become a diagnostic tool of increasing importance. The author discusses recent developments in the field of cardiac catheterization and outlines its use in certain types of congenital and acquired heart disease.

CARDIAC CATHETERIZATION is becoming an increasingly valuable diagnostic procedure in evaluation of patients who have, or are thought to have, lesions which may be surgically correctable. The group of patients who fall into this category is rapidly increasing because of the technical advances in cardiac surgery, which have made it possible to correct many cardiac lesions which were until only recently too complex to attempt.

Cardiac catheterization is a relatively simple and safe procedure, but it is by no means a part of the routine work-up of a cardiac patient. There is no substitute for a thorough evaluation by conventional means to determine as accurately as possible what the problem is and if any information gained from a catheterization will be of benefit in the management of that patient.

If a lesion is suspected which may be surgically correctable, but needs further clarification as to functional significance, or of other associated lesions which may determine the advisability of considering surgery, a catheterization can frequently be of much benefit, both in the diagnosis, and to help determine the technical problems which may be encountered at surgery.

For over ten years, right heart catheterization has been considered the safest and most reliable method for determining the presence and location of cardiac shunts. It is a useful procedure and quite helpful in determining the presence of left to right intracardiac shunts. By determination of blood O_2 saturation, the location of a lesion can be fairly well ascertained. The procedure is not without pitfalls, however, and in many cases the precise nature of the entire picture will be missed with this procedure alone. It is, of course, not very useful in determining the nature and significance of lesions of the mitral or aortic valve.

Read before the 80th semi-annual meeting, Delta Medical Society, Greenwood, Oct. 9, 1963.

There have been many recent developments in the field of cardiac catheterization which have simplified the procedure and have greatly increased the information which may be obtained. The fluoroscopic image intensifiers have made it possible for constant observation of the catheter position by more than one observer and of the pictures of any part of the procedure which may be helpful. By injection of contrast media directly into the various chambers for cineangiography, much information can be obtained which was previously impossible.

It is now also possible to record multiple simultaneous pressure tracings from different chambers as well as the electrocardiogram tracing which can be re-evaluated after the procedure is completed. These pressure tracings, and the oxygen saturation determinations, when evaluated in the light of what is seen on cineangiography can precisely clarify points which could only be suggested prior to the development of cineangiography.

It has been only recently that a safe reliable method for catheterization of the left ventricle has been developed. Probably one of the most widely used and safest is the Seldinger technique. A needle is placed in an artery, usually one of the femoral arteries, a guide wire is threaded through the needle, the needle is then removed, and the

catheter is passed over the guide wire. This can then be passed under fluoroscopic control up the aorta and across the aortic valve into the left ventricle. Pressure determinations in the left ventricle and aorta can be compared to determine if there is a significant pressure gradient across the aortic valve to indicate aortic stenosis or if there is an elevation end-diastolic pressure in the left ventricle to indicate left ventricular failure. Injection of contrast media into the left ventricle will frequently clarify left to right shunts at the ventricular level which were only vaguely suggested, or even not noted on conventional right heart catheterization. Injections can also be made into the aorta to determine competency of aortic valve, demonstrate anomalies such as a patent ductus, or outline the coronary arteries.

NEW TECHNIQUE

Another fairly new technique, which is somewhat more hazardous than conventional right heart catheterization or retrograde left heart catheterization, is trans-septal left heart catheterization. A needle is placed in the right femoral vein and a guide wire introduced in the same manner as for the retrograde left heart catheterization. The catheter is then passed into the right atrium, and a stilus is introduced through the catheter to punch through to the left atrium. The catheter is then passed over the stilus, which is removed. The catheter can then be used to determine left atrial pressures and passed into the left ventricle so that determinations of pressure gradient across the mitral valve can be determined and injections made for cineangiography.

In connection with the rapid advances in cardiac surgery, including improved prosthetic valves, the precise determination of cardiac lesions is getting more and more important as the possibility of their correction improves. It is now possible by one, or a combination of the techniques mentioned, to study all four chambers of the heart, note the pulmonary vasculature as well as calculate the cardiac output.

Some of the more common congenital heart lesions found in patients between adolescence and adulthood which may be considered for cardiac catheterization with the thought of surgical repair or palliation are atrial septal defects, ventricular septal defects, pulmonic stenosis, aortic stenosis, tetralogy Fallot, and patent ductus.

Atrial septal defects should be considered for catheterization and surgical repair if there is any suggestion of increase in pulmonic blood flow or pulmonary hypertension so long as there is not fixed pulmonary hypertension. This information can usually be determined by cardiac catheterization.

INDICATIONS FOR REPAIR

There is some controversy about the indications for surgical repair of ventricular septal defects. Certainly most patients suspected of V.S.D. should have cardiac catheterization for positive diagnosis of the lesion and determination of its functional significance. Correction of this lesion is now considered such a safe procedure that many surgeons feel that its presence alone is indication for surgery due to the high incidence of S.B.E. in these patients. Others feel that surgery is not warranted in the small defects where there is no evidence of significant increase in pulmonary blood flow.

Pulmonic stenosis is a lesion that is at times quite difficult to differentiate clinically from an atrial septal defect and at times it is necessary to differentiate this lesion from aortic stenosis. A catheterization study can determine if there is significant decrease in pulmonary blood flow to warrant surgery and to differentiate this lesion from other congenital heart diseases with a left to right shunt. Since most of the common lesions with left to right shunting are accompanied by some infundibular stenosis the differentiation on clinical grounds alone can be quite difficult. It is also important to determine any associated lesions that might be present.

With the advent of open heart surgery many noncyanotic patients with tetralogy of Fallot may be candidates for definitive surgical repair. The information gained from cardiac catheterization can often be helpful in determining the practicality of definitive correction of this anomaly.

PATENT DUCTUS ARTERIOSUS

The diagnosis of patent ductus arteriosus is frequently quite simple and can be made from conventional means alone without the necessity of cardiac catheterization, but if there is any doubt as to the diagnosis or any suspicion of associated lesions, a cardiac catheterization can be most helpful. It can also be helpful in determining if the patient's pulmonary hypertension is severe enough that correction of this lesion would be unwise.

Aortic stenosis is a lesion that should be considered for surgery at the first indication of failure or disability. A cardiac catheterization provides a simple means to ascertain the pressure gradient across the aortic valve and determine its probable

functional significance. It is also important to rule out other valvular disease such as mitral insufficiency which, if of significant degree, would make successful aortic valve repair much more difficult. It is frequently difficult to be certain from clinical grounds alone that there is not significant mitral valvular disease, particularly mitral insufficiency.

Some of the common acquired cardiac lesions, which are now correctable by surgery, are mitral stenosis, mitral insufficiency, aortic stenosis and aortic insufficiency.

MITRAL STENOSIS

Mitral stenosis is frequently a condition in which it is possible to make a positive diagnosis and surgical repair without the necessity of cardiac catheterization. If, however, there is a suspicion of other associated lesions, a catheterization study may be most helpful in determining this, and in deciding if simple closed mitral commissurotomy is all that is necessary or if the procedure should be done by open heart surgery.

Mital insufficiency is a lesion which has only recently been amenable to surgical correction. At this time only the rather severe cases are considered for surgery because the results are not as good as with some of the other cardiac lesions and it is technically a much more difficult procedure. With the recent use of the Star valve prosthesis, more of these patients fall into the category of corrective or at least palliative surgery. There has been so little experience with prosthetic valves in this lesion that only the severe or progressive problems are generally considered for surgery.

Acquired aortic stenosis is generally a lesion which is best repaired at the initial symptoms of congestive failure. The prognosis in patients with aortic stenosis is so poor, however, that even severe cardiacs with this lesion may be helped by surgery. The mortality in these far advanced cases is, of course, quite high but their outlook without surgery is so grim that surgical correction is generally warranted if there is not significant associated mitral insufficiency or coronary artery disease. This can usually be determined by left heart cardiac catheterization and cineangiography.

Aortic insufficiency is a lesion in which correction is not usually attempted unless there is evidence of progressive deterioration because it is necessary to use a prosthetic valve and there has not been enough experience with the valve to warrant surgery in patients without severe or progressive cardiac decompensation.

SUMMARY

In summary it is felt that cardiac catheterization is a most useful tool in determining the advisability of cardiac surgery in various types of congenital and acquired heart disease. It gives information that is frequently most helpful in determining the type of surgery to be done, as well as the advisability of surgery itself. It should be again stressed that cardiac catheterization is not a routine diagnostic procedure, and should be done only in patients in which the information gathered may be helpful in determining clinical care of that patient. ★★★

344 Arnold Ave.

CAUSE FOR CONCERN

A new father was looking at the babies through the window of the nursery and it seemed as though every child was crying. "Why are they so unhappy?" he asked the nurse. "Well," she said, "if you were only a few days old, without any clothes, out of a job, and owed the government almost $1,700 on the national debt, you'd be crying too."

Hemoglobin: A Review

LEONARD C. HIGGINS, JR., M.D.
Jackson, Mississippi

Recently, numerous abnormalities of the hemoglobin complex have been described, but many of these are not associated with clinical disturbances. A brief review of the hemoglobin complex and some of the more common abnormalities is presented.

VERTEBRATE HEMOGLOBIN is a complex protein containing some ten thousand atoms, the molecular weight of which is about 67,000. Four of these atoms are iron; each is bound to protoporphyrin to form four heme groups. The remaining atoms form four polypeptide chains which are present as two identical pairs, designated alpha and beta chains. They are approximately equal in size; each pair contains about 300 amino acids. It has been shown that the hemoglobin of the horse is an ellipsoid molecule measuring 55 × 55 × 70 angstroms. Human hemoglobin is thought to be of a similar configuration.[3, 23]

Lecanu, in 1827, discovered that hemoglobin contained iron, and hemoglobin was crystallized by Hünefeld in 1840. In 1886, the iron content of hemoglobin was accurately evaluated by Zinoffsky. Peters, in 1912, established the relationship between iron content and reversibly bound oxygen in oxyhemoglobin. In 1929, after 15 years of work, Fischer and Zeile synthesized heme.[2] In 1949 Pauling and Itano discovered that normal adult hemoglobin A differed from the hemoglobin of sickle cell disease.[4]

HEMOGLOBINOPATHY

Since that time many variations in hemoglobin have been discovered, and since disease entities are associated with some of these abnormalities, the term hemoglobinopathy has arisen.

Before considering any of the various hemoglobinopathies, the current concepts of iron metabolism, porphyrin synthesis, globin synthesis, and theories of hemoglobin synthesis will be briefly reviewed.

It has been established that the body contains about 4 or 5 gm. of iron and that about 60 per cent of it is to be found in hemoglobin. Of the remaining 40 per cent, half is to be found in myoglobin and various enzymes and the other half in storage in the liver, spleen, reticuloendothelial system, bone marrow, and in a small labile pool. The usual daily diet supplies 10 to 30 mg. of iron of which only about 10 per cent is absorbed by the duodenal mucosa after having been acted upon by gastric acid and reduced to the ferrous state. In the duodenal mucosa the iron combines with apoferritin to form ferritin. By intracellular mechanisms the ferric iron of ferritin is reduced to the ferrous state and enters the peripheral blood where it is auto-oxidized and chelated to transferrin, a beta-1 globulin, which carries the iron to the marrow.[1, 6] Iron may reach the erythroblast by a process of "pinocytosis," the mechanism described by Bessis by which ferritin enters and leaves the erythroblast.[5] It has been demonstrated that ferrous iron is released from ferritin in the presence of some reducing agents such as ascorbic acid and reduced glutathione.[10]

Porphyrin synthesis begins with the combination of glycine and succinate derivative in the presence of ALA synthetase, pyridoxal phosphate and ferrous iron to produce alpha-amino beta-keto adipic acid. Carbon dioxide is lost and the compound becomes delta-amino levulinic acid or ALA which when acted upon by ALA dehydrase produces porphobilinogen (PBG). Subsequently uroporphyrin III, coproporphyrin III, and protoporphyrin are produced. Protoporphyrin plus ferrous iron in the presence of ferrochelatase produces heme.[2]

From the Hematology Section, Medical Research, Veterans Administration Hospital.

No abnormality of the heme moiety has been described except in the case of hemoglobin M[8, 13] and possibly in thalassemia major.

The clinical problems related to acquired abnormality of the heme portion of the hemoglobin molecule are usually due to some chemical combination with a foreign substance producing compounds such as: (a) carboxyhemoglobin due to combination with carbon monoxide, (b) methemoglobin, in which the heme is oxidized by a number of drugs or chemicals and (c) sulfhemoglobin due to drugs.[14]

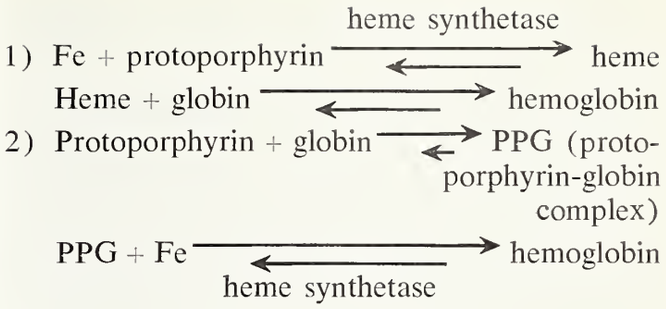
The affinity of carbon monoxide for hemoglobin is 210 times greater than that of oxygen. Hemoglobin combined with carbon monoxide is not available for oxygen transport and the toxicity is the result of anoxia.[24]

Methemoglobin is a hemoglobin derivative in which the ferric form of iron is present instead of the normal ferrous form and therefore does not combine with oxygen. Methemoglobin may be reduced by such agents as ascorbic acid and glutathione which are normally in the bloodstream or therapeutically with methylene blue.[19] Anilin, phenacetin, acetanilid, sulfa drugs, nitrobenzene, nitrites, and nitroglycerine are a few of the commonly used agents which are capable of producing methemoglobinemia.[24] There is also a rare familial disease, called congenital methemoglobinemia or hereditary methemoglobinemia, in which there is an abnormality in the globin portion of the molecule. This entity was first described by Hörlein *et al* in 1948.[13]

Sulfhemoglobin is produced by reaction of hemoglobin, soluble inorganic sulfides and hydrogen peroxide and cannot be changed into hemoglobin unless it is degraded into its basic components. Sulfhemoglobin has been found after use of acetanilid and phenacetin and an unknown endogenous source of sulfur is thought to be present. The treatment of this abnormality is obviously one of prevention.[24]

The globin portion of the hemoglobin molecule consists of four polypeptide chains arranged in an alpha helix. Recent work shows that the synthesis of globin begins early in the process of erythroid maturation and that heme synthesis occupies a shorter period of time at a later stage of maturation.[9] Others[2] have noted that globin synthesis preceded heme synthesis and the globin synthesis was almost completed by the time heme synthesis began.

Two theories for the production of hemoglobin have been set forth by Wintrobe, Cartwright *et al.*[12]



The biosynthesis of hemoglobin is also necessary for the production of cytochromes, catalases, and peroxidases.[10]

Each of the four polypeptide chains of globin is associated with a heme group and arranged in an ellipsoid mass. Normal hemoglobin A contains two alpha and two beta chains and may be written as follows: Hemoglobin A = $\alpha_2^A \beta_2^A$. However, normal hemoglobin contains several varieties of hemoglobin which are designated A, A2, A3, F, and possibly A4. Fetal hemoglobin is composed of two alpha chains and two gamma chains and may be written: Hemoglobin F = $\alpha_2^F \gamma_2^F$. Hemoglobin A2 is composed of two alpha chains and two delta chains and is therefore written: $\alpha_2^{A2} \delta_2^{A2}$.[13] Each chain having differences in the sequence of the amino acids has been assigned a small Greek letter, thus the α, β, γ, δ chains.

The long polypeptide chains may be broken down into smaller fragments by digestion of heat-treated hemoglobin by trypsin. Trypsin splits the polypeptide chains at sites where lysine or arginine molecules occur in each half molecule of hemoglobin and yields about 28 fragments.[23]

By using a combination of electrophoresis and chromatography or the finger printing technique it has been established that the abnormality in the hemoglobin of sickle cell disease and of hemoglobin C disease is in the fourth polypeptide fragment. In the case of sickle cell disease, glutamic acid in the fourth peptide fragment is replaced by valine and in hemoglobin C disease is replaced by lysine.[23, 13]

A proposed sequence of the amino acids of the alpha chain has been published[11] but, to my knowledge, there are no references to the sequence of amino acids in the beta chain nor is the exact number of amino acids known. It has been stated, however, that the beta chain is larger than the alpha chain and contains about eight more amino acids.[16]

The heterogeneity of normal hemoglobin by electrophoresis was described in 1953.[4] Erythrocytes contain about 90 per cent hemoglobin A; the remaining 10 per cent is hemoglobin A2, A3, and F.[13] The alkali resistant hemoglobin present

in adult hemoglobin appears normally in small amounts. About 2 per cent is alkali resistant, and it is thought to be the same as fetal hemoglobin.[4] By the end of pregnancy about 50 per cent of the hemoglobin is in the adult form,[15] but others have stated that as much as 70 to 90 per cent of the hemoglobin is present in the form of hemoglobin F. By the age of four months as much as 10 per cent may be hemoglobin F and by four years of age no more than 1 to 2 per cent is present.[14] Hemoglobins A and F are under independent genetic control, and once hemoglobin F production is stopped it probably cannot be resumed.[17]

TEST TECHNIQUE

The alkali denaturation test is used to detect and to measure quantitatively the amount of hemoglobin F present since it is the only known hemoglobin that is resistant to denaturation by this technique. The test is performed by adding 1/12 N KOH to the hemoglobin solution and after one minute the reaction is stopped with 50 per cent saturated solution of $(NH_4)_2SO_4$. The solution is then filtered and the quantity of hemoglobin in the filtrate is compared with that of the original solution. Hemoglobin F and G may be distinguished in this fashion. Up to 5 per cent hemoglobin F may be found in certain megaloblastic anemias, congenital spherocytic anemias, leukemias in children, and some refractory anemias with hyperplastic marrows.[14] About one in a thousand Negroes will show an increase in hemoglobin F.[18]

As previously noted, minor components of hemoglobin A have been defined and designated hemoglobin A2 and A3. The A2 variety normally represents about 2½ per cent but in the thalassemia trait may be elevated to about 5 per cent.[7] A variant of hemoglobin A2 has also been described and is designated A'_2.[22]

Thalassemia minor is an expression of three defects in hemoglobin production. There is an increase in hemoglobin A2, a decrease in hemoglobin A and the presence of hemoglobin F. In thalassemia major, on the other hand, there is usually no increase in hemoglobin A2, but the fetal component is markedly increased. Recently many additional variations in the laboratory picture of thalassemia states have been discovered. Clinically there may be hepatomegaly, splenomegaly, and a microcytic hypochromic hemolytic anemia. Target cells are numerous. There is evidence to suggest that there is a defect in porphyrin synthesis or in the combination of iron with protoporphyrin.[13, 17]

HEREDITY FACTOR

All hemoglobinopathies are hereditary, and the abnormality may or may not be associated with hemolytic anemia and may or may not show morphologic changes.

By the finger printing technique it has been shown that the defect lies in the amino acid sequence of the beta chain in hemoglobins C, E, D-beta, G, J, L, and S. It has been suggested that the abnormality in hemoglobins D-alpha, I, P, Q, and Hopkins-2 is located in the alpha chain. The occurrence of two abnormalities in the alpha and beta chains has been reported.[13]

Sickle cell disease and hemoglobin M disease are the only states in which alteration of the capacity for oxygen and alteration of the association and dissociation of CO_2 have been described.[13]

Of all the abnormal hemoglobins, disease states associated with hemoglobins C, D, E, S and thalassemia are the most important.[14]

Hemoglobin C occurs most frequently in Negroes and has its highest geographical incidence in Northern Ghana. The trait is usually asymptomatic but may show slight hypochromia and increased target cells. Hemoglobin SC disease is characterized by a chronic hemolytic anemia and symptoms are similar to but less severe than those of sickle cell disease. Thrombotic episodes in the spleen and central nervous system, gross hematuria, and aseptic necrosis of the femoral heads have all been reported in this disease.[14, 15, 20]

Hemoglobin D is apparently of little or no importance when homozygous or when manifest as a trait with normal hemoglobin. It is found in about 0.4 per cent of American Negroes and about 2 per cent of the Algerian Moslems and in the Sikhs. The only abnormality noted has been a mild microcytic normochromic anemia.[13]

Hemoglobin E behaves electrophoretically like hemoglobin A2. The defect is found in the 26th peptide fragment where glutamic acid is replaced by lysine.[15, 23] The highest incidence is in southeast Asia. Both the trait and the disease are asymptomatic but clinically there is a mild hemolytic anemia with mild erythroid hyperplasia of the bone marrow and in some the spleen may be enlarged.[13]

Hemoglobin H is an example of a tetramer; that is, it is composed of four similar polypeptide chains. Since these are beta chains, hemoglobin H is written: B_4^H. The only other known tetramer

is Bart's hemoglobin which consists of four gamma chains. It is written: $\gamma_4^{Bart's}$.[13]

Hemoglobin SS occurs in about 0.4 per cent of Negroes, but the trait, hemoglobin SA, occurs in about 8.5 per cent.[21] It is interesting to note that sickle cell disease does not occur in the Bantu.[15]

When electrophoresis is performed at pH 8.6, no distinction can be made between hemoglobins S and D, F and G, A and J, and H and I. Electrophoresis in a phosphate buffer at pH 7.8 will separate A and J and in a phosphate buffer at pH 6.5 will separate H from I. Hemoglobin H is the only one migrating to the anode at this pH. The low ferrohemoglobin solubility of hemoglobin S may be used to distinguish it from hemoglobin D which has a high solubility. Hemoglobin H is the only other known hemoglobin having low ferrohemoglobin solubility. Hemoglobin F may be separated from G by the alkali denaturation tests.[4]

★★★

1500 E. Woodrow Wilson

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DISTRACTING DELUSION

A wife went to the doctor to complain about her husband's delusions. "It's terrible," said she. "All the time he thinks he's a refrigerator." "Don't worry," consoled the physician. "That's quite a harmless delusion." "The delusion I don't mind," said the wife. "But when he sleeps with his mouth open, the little light keeps me awake."

Radiologic Seminar XXXI: Retrocaval Ureter

A. WAYNE SULLIVAN, M.D.
Meridian, Mississippi

In its normal course the abdominal portion of the right ureter occupies a position lateral to the inferior vena cava, and on radiographs the opacified ureter is usually demonstrated lying to the right of the vertebral column. There is, however, a rare congenital anomaly involving the right ureter in which it passes behind the inferior vena cava, turns anteriorly between the vena cava and the aorta, then crosses over the front surface of the vena cava until it resumes its normal lateral position (Figure 1). Embryologically, it is felt that the unusual course of the ureter is secondary to an anomalous development of the inferior vena cava, with this vessel being formed from the primitive anterior subcardial vein rather than from the usual posterior right supracardial vein.

In this situation the ureter may become obstructed as it passes behind and around the vena cava, producing hydronephrosis and proximal hydroureter. It is this complication which makes the anomaly of clinical significance, and the correct diagnosis may be suggested by the radiographic findings on intravenous or retrograde pyelography. On an intravenous pyelogram, the diagnosis may be suspected when obstructive dilatation is demonstrated in the calyceal system, renal pelvis, and upper segment of the ureter, especially if the upper ureter appears to angulate medially. Retrograde pyelography (Figures 2 and 3) will demonstrate more clearly the abnormal course of the ureter, with a considerable segment of this structure overlying the vertebral column in the lower lumbar area.

Ideally, treatment consists of division of the ureter and reanastomosis anterior to the vena

Figure 1. A schematic drawing indicating the anatomical course of the right ureter when it pursues a retrocaval course. The left ureter is in the normal position.

Sponsored by the Mississippi Radiological Society.

cava, but nephrectomy may be indicated if the kidney has been too badly damaged by long-standing obstruction and infection. The possibility of a redundant ureter or extrinsic displacement by a retroperitoneal mass should be considered in the differential diagnosis, but usually these possibilities can be eliminated by other studies. Simultaneous opacification of the ureter and the inferior vena cava, with appropriate radiographs, will clearly show the nature of the lesion. ★★★

1204-21st Ave.

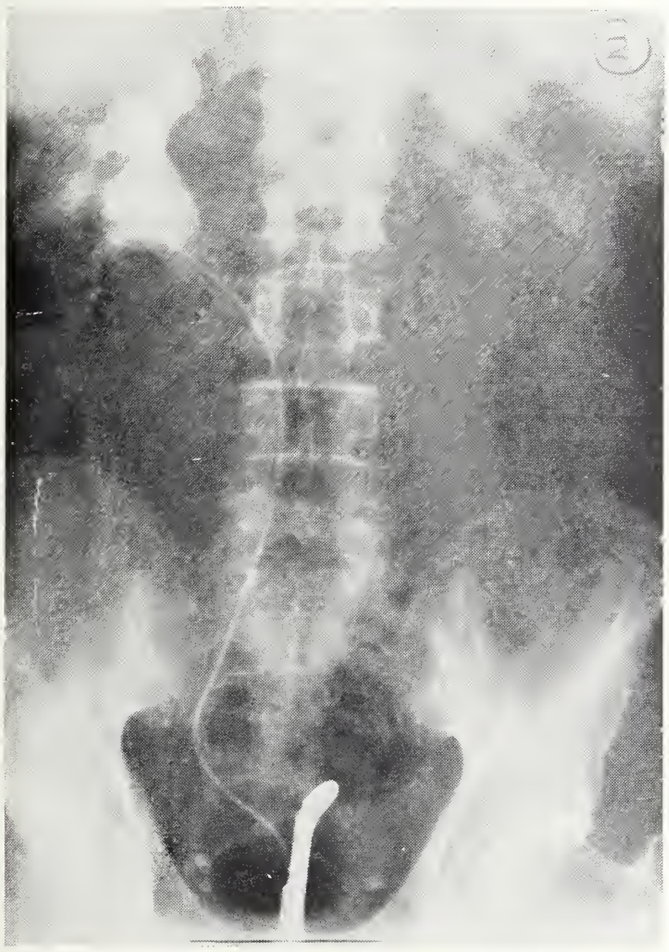

Figure 2. A catheter has been passed well up into the right drainage tract, and contrast material demonstrated moderate hydronephrosis. Note the medial position of the catheter, overlying the vertebral column in the lower lumbar area.

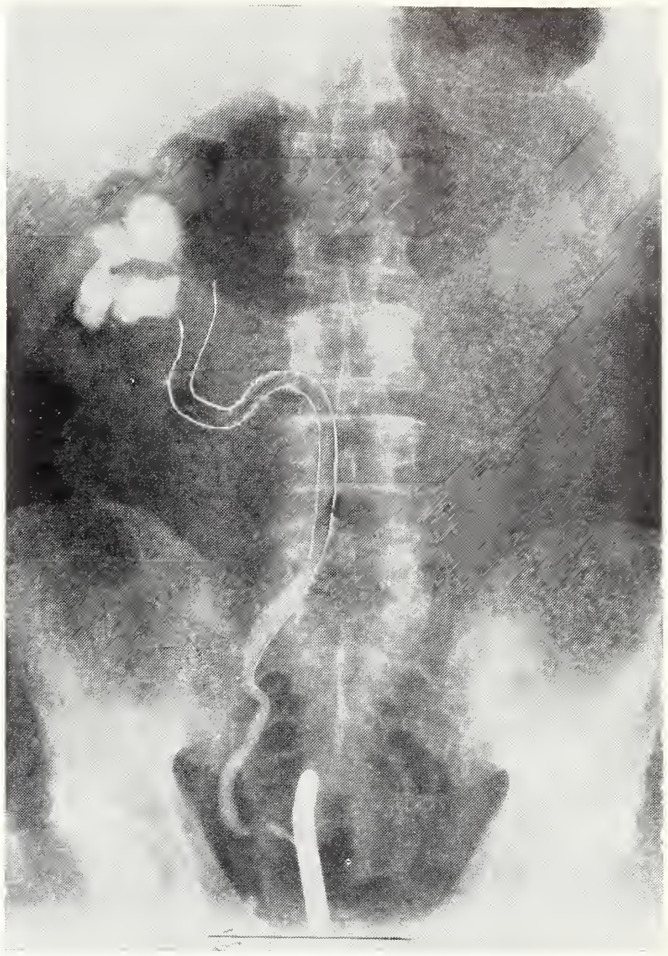

Figure 3. The lower ureter has been filled by the retrograde injection of contrast material through a bulb catheter wedged against the uretero-vesical orifice. Note the unusual course of the ureter, with the typical angulation as it hooks around the inferior vena cava. (Retouched for purposes of illustration.)

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THE PERFECT GIFT

A children's shop advertised a toy as "a gift guaranteed to teach any child how to live in today's world." Seems that no matter how you put it together, it's wrong.

Clinicopathological Conference LVIII

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

This month's CPC concerns a 21-year-old colored service station worker who was admitted for a biopsy of a cystic lesion of the distal third of the right tibia. About three years prior to admission, the patient fractured the right lower tibia. He was told at that time that he had a small bone cyst at the fracture site. The patient did well until one month prior to his hospitalization when he fell and sustained another fracture through the same bone cyst, which had enlarged. The discusser is Dr. Paul Derian, and Dr. Catherine G. Goetz presents the autopsy report.

THIS WAS THE FIRST University Medical Center admission for this 21-year-old colored service station worker from Brandon. He entered this hospital on May 21, 1961, as an elective admission for a biopsy of a cystic lesion of the distal third of the right tibia. The patient offered no specific complaint.

About three years prior to admission, the patient fractured the right lower tibia while wrestling. Mechanism of the injury is not known, but it was thought at the time that this was probably a torsion injury. He was seen by his local physician who made x-rays and told the patient that he had a fracture of the distal tibia. He was told at that time that he had a small bone cyst at the fracture site. He was treated in a long-leg cast for four and one-half months, healing apparently without difficulty.

The patient did well, having no complaints referable to the right leg, until one month prior to his hospitalization, when he fell and re-injured the right lower leg. This was on April 22, 1961. He returned to his local physician, who x-rayed the leg again and found another fracture through the same bone cyst, which had enlarged. The patient was referred to the University Hospital because of the enlarged cyst. He stated that prior to the injury on April 22, 1961, he had been completely asymptomatic, having no pain or unusual constitutional symptoms.

Past history revealed generally good health. Four years prior to admission, he had "yellow jaundice." This episode was followed by no sequela. He also gave a history of "sores" on the anterior tibial surface of both lower legs. There was however, no history of osteomyelitis. Past history and review of symptoms was otherwise noncontributory.

Physical examination revealed a well-developed, well-nourished colored male, who was in no acute distress. The right leg was in a posterior splint. His blood pressure was 140/100, pulse 80 and regular, temperature 98.6, respiration 18. Skin showed no unusual lesions. There was no lymphadenopathy. Examination of the head and neck were within normal limits. The chest was clear. Examination of the heart revealed a normal sinus rhythm, without murmur or enlargement. Examination of the abdomen revealed that it was flat without scars. There was no tenderness and no palpable organs or masses. Examination of the right leg revealed moderate tenderness over the distal third of the leg, without overlying skin changes. No break in the skin was noted. There was no mass palpable, and there was no neurovascular deficit in the right foot.

LABORATORY DATA

Admission examination revealed a hematocrit 38, hemoglobin of 13.6, white count 5,500, with a normal differential. Admission urine analysis was normal. VDRL was nonreactive, calcium 5.5, phosphorus 4.5, alkaline phosphatase 9 King-Armstrong units, BUN 15, FBS 81. Chest x-rays were

not remarkable. X-ray of the right tibia showed a multilocular cystic lesion proximal to the distal epiphyseal line. Lesion was contained within the bony cortex. There was a small fracture line through the cystic area.

On May 22, 1961 the patient was taken to the operating room, where the lesion was curetted and packed with autogenous bone from the iliac crest. The patient's postoperative course was uneventful and he remained afebrile. He was discharged from the hospital on May 25, 1961, for follow-up care in the Orthopedic Clinic.

DISCUSSION

Dr. Paul S. Derian: "Reversing the conventional protocol, could we see the x-ray films? An obvious multicystic lesion is present in the distal tibia 3 cm. distal to the joint mortise. The epiphysis is closed. The lesion measures 6.2 cm. by 2.5 cm. There appears to be cortical irregularity along the lateral tibial border without periosteal elevation. The cortical irregularity is not due to an expanding lesion, but to trauma. The tumor is limited to a nonepiphyseal area. Although not significant, there appears to be trabeculation present. The diagnostic value of this relationship has been overemphasized. Because the lesion apparently was of long standing (three years' duration), and the patient is in the 20-year-old age group, the following differential diagnosis is made:

a. Benign chondroblastoma
b. Fibrous dysplasia mono-cystic
c. Giant cell tumor
d. Low grade fibrosarcoma
e. Hyperparathyroidism
f. Nonossifying fibroma
g. Aneurysmal bone cyst

"Before delving into an opinion as to the exact diagnosis, a few comments should be made directed toward the healing of fractures in a cystic lesion and the diagnostic approach. A variety of statistics are often given, but generally a fracture through a cystic area will obliterate the cyst in approximately 15 to 20 per cent of the cases.

"There is no doubt that an exact diagnosis cannot be made on a clinical and radiographic evaluation. It must be made on the combination of the above plus a tissue impression. The evaluation of the pathological pattern must be based, however, on the dominant histological appearance.

"An accessible bony lesion should have an open biopsy. In general a closed biopsy can be used when the lesion is not accessible (vertebral bodies). In a closed biopsy, when the tissue report returns without a diagnosis, this does not imply that the lesion does not exist. The surgeon must be determined to repeat the biopsy. A specific diagnosis in a closed biopsy can be obtained approximately 55 to 60 per cent. A second difficulty with the closed biopsy is that the tissue may be inadequate for a histological interpretation. This is especially true if one is dealing with cartilaginous tumor. The question whether or not the lesion is benign or malignant will be difficult. Although a frozen section is of value in determining a benign or malignant lesion, the final diagnosis is on a permanent rather than a temporary section. In an open biopsy the surgical trauma should be minimal. The chosen site should be at the periphery and all attempts should be made to obtain a tissue specimen of an involved and uninvolved region.

"Should the decision as to the type of surgery be made on a frozen section in bony lesion? The answers to this question depend largely on the type and the amount of tissue which is obtained. If the tissue was cartilaginous, it is wiser to wait until paraffin sections are made. However, if there is no doubt in the pathologist's and the surgeon's observation of the frozen section coupled with the x-ray findings and clinical course, definitive surgery may be undertaken. Ablation should only be done when a specific malignant tumor can be histologically identified.

"In the evaluation of the patient the presenting complex was that of a 3-year-old lesion with superimposed trauma. The high lights are:

a. Age
b. The lesion's position at the end of a long bone
c. The radiographic evidence that the lesion is rather large with areas of radiolucency with little trabeculation
d. A closed epiphysis

"The diagnosis in all probability is that of a giant cell tumor. It was my understanding that this was the only lesion found on this patient so we will not review any other films.

"In a benign chondroblastoma the epiphysis are open with the lesion located in the epiphyseal region. The age group is younger than 20. A bone abscess (Brodies) may be a problem in differential diagnosis. The issue specifically arises on radiographic basis. In general, in a Brodies abscess, the surrounding bone is thickened, no bony trabeculations are used, the lesion is metaphyseal. A clinical pattern of sequences with temperature and pulse elevation is apparent. Unfortunately there is nothing distinctive or characteristic about the clinical findings in a nonossifying fibroma. Its radiographic appearance, however, is of value. It is ec-

centrically located, being represented by a loculated lesion away from the epiphysial plate. The x-ray appearance of an aneurysmal bone cyst is an expanding lesion in the diaphysis or metaphysis. With a low grade fibrosarcoma one would expect some periosteal elevation, cortical disruption, and bony erosion.

"The clinical impression is that of a giant cell tumor, ruling out a nonossifying fibroma.'

PATHOLOGIST'S REPORT

Dr. Catherine Goetz: "This lesion is a giant cell tumor, but this diagnosis is not made on the presence of giant cells alone. Giant cells may occur in any of the lesions mentioned by Dr. Derian in his differential diagnosis and many other bone lesions also. Microscopically the typical picture of a giant cell tumor is that of a vascularized network of spindle-shaped and ovoid cells intermingled with multinucleated giant cells. The authorities say that the more a given lesion varies from the typical the less likely it is to be a giant cell tumor.

"To give intelligent diagnosis on any tissue the pathologist needs pertinent history and laboratory data but never is it more important than in interpreting bone lesions." ★★★

2500 North State St.

VIRTUE—A REWARD?

London Lee told this one in *Parade:* "I was in the Bowery the other day and a guy came up to me and asked for a quarter. He looked like he really needed it, too—he needed a shave, his clothes were a mess, and he looked like he hadn't slept for a week. But rather than offering him money, I said to him: "Have a cigar?" "No, thanks," answered the fellow. "I don't smoke. I just want a quarter for something to eat." "Look," I said, "let's go into a bar, and I'll buy you a couple of drinks." "Sorry," said the bum, "I don't drink." "How about going to the races with me?" I asked. "I have a tip on a sure thing." "No—I never gamble!" cried out the panhandler, "but I eat once in a while when I can get hold of some money!" "Okay, okay," I told him, "but before I give you any money, I want you to come over to my house and meet my wife. I want her to see with her own eyes what happens to a guy who doesn't smoke, drink, or gamble!"

Book Reviews

Cancer of the Stomach. By William H. Re-Mine, M.D., M.S. in Surgery, and James T. Priestley, M.D., M.S. in Experimental Surgery, and Joseph Berkson, M.D., D.Sc., and Members of the Staff of the Mayo Clinic. 255 pages with illustrations, Philadelphia: W. B. Saunders Company, 1964. $11.50.

This excellent book of 236 pages brings up to date and presents in coordinated form the cumulative experience of the staff of the Mayo Clinic with cancer of the stomach.

Each of the 15 chapters is written by a different specialist. The chapters are as follows:

1. Historical review of surgical aspects of carcinoma of the stomach
2. Recognition of malignant lesions of the stomach
3. The roentgenologic diagnosis of carcinoma of the stomach
4. Gastroscopic diagnosis
5. Special laboratory procedures
6. Evaluation of clinical evidence in the decision regarding operation
7. Anesthesia for surgical procedures on the stomach and duodenum
8. Partial gastrectomy and subtotal gastric resection with comments on factors that may affect prognosis
9. Total gastrectomy
10. Surgical aspects of malignant lesions of the esophagogastric junction
11. Palliative operations for gastric cancer
12. Gastric sarcoma
13. Postoperative care
14. Pathologic aspects of primary malignant neoplasms of the stomach
15. Statistical summary

The death rate from cancer of the stomach in the United States has been declining steadily for a good many years. The reason for this decline is unknown. In spite of this favorable fact, there remains a feeling among the members of the medical profession that we, as surgeons, have made little, if any, progress in the early diagnosis and successful treatment of cancer of the stomach. This book demonstrates that in the experience of the Mayo Clinic there has, in fact, been a considerable improvement both in early diagnosis and in the percentage of patients who survive for five years following definitive surgery.

A high index of suspicion is necessary for the physician treating vague gastrointestinal symptoms. A negative stomach x-ray should be repeated if the patient's symptoms do not promptly improve, for early diagnosis is essential to successful treatment. We are reminded that a small innocent looking gastric ulcer has a 10 per cent chance of being malignant.

While this volume is arranged to make it a good reference book, its style is so pleasant that it makes for enjoyable reading.

GEORGE F. ARCHER, M.D.

Gastroenterology, Volume II. By Henry L. Bockus. Second edition. 1241 pages with illustrations. Philadelphia: W. B. Saunders Company, 1964. $28.00.

The second volume of the new edition of *Bockus' Gastroenterology* represents a towering achievement in medical writing. The broad contents of this book encompass the small intestine, colon, peritoneum, mesentery, and omentum, providing a clearly stated text, profuse illustrations (many in color) and an extensive bibliography.

Each division is treated separately, with preliminary consideration of anatomy, embryology, and physiology; these fundamentals are uniformly lucid and authoritative in presentation. Special chapters are interspersed throughout the work dealing with diagnostic modalities, including a full discussion of the technique and interpretation of the small bowel biopsy, an adequate discussion of the radiology of the small bowel and colon, intestinal intubation, the various studies relative to malabsorption problems, proctoscopy, peritoneoscopy, and lymphangiography. The presentations are well illustrated and, although perhaps not encyclopedic, are more than adequate in coverage.

The authors, present or past colleagues of Dr. Bockus, have covered the pertinent complex of diseases in a generally first-rate manner. As one would anticipate there are some areas less well covered than others. As an example, the Zollinger-Ellison syndrome is given a trifle over 3 pages, while 23 pages are devoted to intestinal tuberculosis and nearly 100 pages to regional enteritis.

The latter two presentations are superb, the first is only adequate.

Regional enteritis and ulcerative colitis are considered in greater detail in separate sections. Full attention is devoted to various forms of each disease, their systemic manifestations, complications, and clinical course. Many excellent illustrations are provided. Therapy is considered from every aspect.

Chapters on functional (i.e. psychosomatic) affections, anemia and gastrointestinal disease, nutritional effects on the gastrointestinal tract, recurring familial polyserositis, various intestinal infections, and the differential diagnosis of diarrhea provide an extra fillip to the full coverage of the common and uncommon disease states.

This volume can be recommended without reservation to any physician interested in any aspect of gastroenterology.

E. H. Posey, Jr., M.D.

Books Received

Textbook of Pediatrics. Edited by Waldo E. Nelson, M.D., with the collaboration of 85 contributors. Eighth edition. 1,636 pages. Philadelphia: W. B. Saunders Company, 1964. $18.00.

Diseases of Metabolism: Detailed Methods of Diagnosis and Treatment. Edited by Garfield G. Duncan. Fifth edition. 1,551 pages with illustrations. Philadelphia: W. B. Saunders Company, 1964. $28.00.

Massage: Principles and Techniques. By Gertrude Beard, R.N., R.P.T. and Elizabeth C. Wood, A.M., M.S., R.P.T. 163 pages with illustrations by Vicki Catalani. Philadelphia: W. B. Saunders Company, 1964. $6.00.

Emergency Treatment and Management. By Thos. Flint, Jr., M.D. Third edition. 686 pages with illustrations. Philadelphia: W. B. Saunders Company, 1964. $8.75.

AUXILIARY

Central Auxiliary Names 1964-65 Officers

Central Medical Auxiliary has named Mrs. William G. Warner president for the coming year with Mrs. John R. Bise as president-elect.

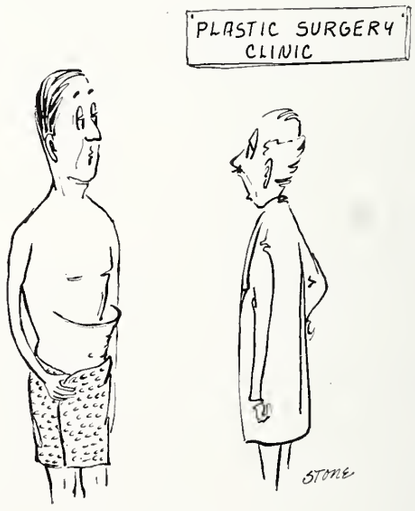
Serving with them will be Mrs. Robert Q. Marston, vice president; Mrs. Joel Alvis, secretary; Mrs. S. H. McDonnieal, treasurer; Mrs. W. L. Crouch, parliamentarian, and Mrs. Van Dyke Hagaman, historian.

The appointed board members include Mrs. Walter Simmons, arrangements; Mrs. Jessie L. Wofford, convention chairman; Mrs. T. K. Williams, civil defense; Mrs. Doyle Smith, AMA-ERF; Mrs. Curtis Caine, Doctor's Day chairman; Mrs. Walton Lipscomb, Cancer Loan chairman; Mrs. David Scruggs, Research and Romance; Mrs. Guy D. Campbell, Mental Health; Mrs. Robert Surrat, telephone; Mrs. Cecil Jenkins, telephone co-chairman; Mrs. Ralph Sneed, public health and Preventorium; Mrs. Leonard Posey, Student Association Medical Auxiliary; Mrs. Robert B. Ireland, legislative chairman, and Mrs. Ralph Daniel, publicity.

Mrs. Campbell Heads Clarksdale Auxiliary

Mrs. Joe A. Campbell, Jr., is the new president of the Clarksdale and Six Counties Medical Society. Serving with her will be Mrs. Whitman B. Johnson, Jr., president-elect; Mrs. Robert L. Forman, vice president, and Mrs. William B. Bobo, secretary-treasurer.

The following committee chairmen were appointed by the new president: Mrs. Douglas B. Haynes, Jr., AMA-ERF; Mrs. Melvin Ehrich, Mental Health; Mrs. Julius L. Levy, Nurse Recruitment; Mrs. William Crowson, Legislation; Mrs. Steve C. Leist, Rural Health, and Mrs. Jack Sartin, Publicity.



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"Well, Zebonsky, you're ready for the hidden ball play that's going to have the whole football league talking."

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Meeting, Nov. 29-Dec. 2, 1964, Bal Harbour, Fla. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn, Chicago 10, Ill.

International College of Surgeons, North American Federation, April 25-29, 1965, Las Vegas, Nev. Mr. Stanley Henwood, Executive Director, 1516 Lake Shore Dr., Chicago 60610.

Southern Medical Association, Nov. 16-19, 1964, Memphis, Tenn. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 10-13, 1965, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday January, First Wednesday March, May, July, September, November. Charles D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March, June, September, and December. William E. Riecken, Jr., P. O. Box 831, Kosciusko, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday April and October, Oxford. Vernon B. Harrison, P. O. Box 36, University, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucius Olen Crosby Memorial Hospital, Picayune, Secretary.

South Central Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.

The President Speaking

'Norman Welch, Medical Statesman'

OMAR SIMMONS, M.D.
Newton, Mississippi

DR. NORMAN A. WELCH, who served as the 118th president of the American Medical Association for only 71 days, left an indelible mark upon the profession to which he was so totally dedicated. This versatile internist reversed the old political axiom that you must first be elected before becoming a statesman. When he was named president-elect of AMA at Atlantic City in 1963 without opposition, his position as a medical statesman was solidly established.

As president-elect, Dr. Welch visited Mississippi. Just over a year ago, he appeared at the annual meeting of the Mississippi Academy of General Practice as principal speaker. He expressed his esteem for Mississippi physicians, and as a respected professor of medicine at Tufts, his praise for our University of Mississippi School of Medicine and Hospital was doubly valued.

At San Francisco last June when he was inaugurated president, his call for unity among physicians and for the pursuit of excellence in scientific activities generated new enthusiasm for his assumption of leadership. What we physicians lost in his untimely death was substantially diminished in what we gained from his brief service. Perhaps Dr. Welch's call for unity is being heeded more than ever, because the profession is one in its support of Dr. Donovan Ward's early succession to the highest office within the gift of one physician to another.

The AMA Board of Trustees has established the Norman A. Welch Memorial Fund within the structure of the American Medical Association Education and Research Foundation. The fund will exist in perpetuity to assist deserving medical students, interns, and residents. Many American physicians will add another digit to the sum of their AMA-ERF gift this year in the hope that another Norman Welch for another generation may thereby be encouraged. ★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume V, Number 11

November 1964

EDITORIALS

'Anti-Duplication'—Dollar Excision From Health Plan Benefits

I

THE TEAPOT TEMPEST over multiple health insurance coverage where the assured individual supposedly profits financially from illness is about to blow sky high. The insurance industry is busy sharpening its paring knife with the singular purpose in mind of trimming off every benefit dollar which is not paid out for medical care. So the medical service-consuming, health insurance-buying public, the medical profession, and the hospital industry may just as well batten down the hatches for a storm of controversy.

The issue is deceptively simple: John Doe buys not one but two or more health insurance policies, each offering stated monetary benefits in event of various illnesses or injuries. Then, say insurance spokesmen, John enters the hospital for surgery, and upon filing his claims, he receives more money than he needs to pay the entire cost of the care. The difference John pockets is described as over-insurance and identified by the carriers as "economic wastage." Admittedly, little can be done by the insurance companies where multiple coverage is in individual contracts, but a new device called the Group Model Anti-Duplication Provision, if and when universally adopted, will reduce group benefit payments, despite allowable amounts, to the exact charges for John's care.

George W. Lane, Jr., third vice president of the Metropolitan Life Insurance Co., puts it this way: "When we speak about over-insurance against medical expenses, we are referring specifically to persons who are insured under two or more plans which enable them to collect an aggregate of insurance benefits that exceeds their allowable medical expenses. The problem, therefore, is that of the person who profits financially from his own illness, and we may say that in many cases the degree of profit is often in direct proportion to the amount of medical expenses incurred. At best, this has the effect of removing any incentive that the individual may have to control his medical expenses."

II

The anti-duplication provision has been approved by the Health Insurance Association of America, the Life Insurance Association of America, and the American Life Convention. These three bodies represent 90 per cent of all domestic companies writing health insurance. The provision, insurance people assert, is based on two guiding principles:

—Employers and employees will accept non-duplication provided it permits recovery by the insured of all covered medical expenses, and

—In order to be effective, claim settlement has to be simple and easily understandable to employers and claimants.

So the model anti-duplication provision begins by almost guaranteeing recovery in whole or part

of reasonable and customary charges for necessary care under any one of the plans before either plan (in the case of two policies) reduces its benefit payments. Such expenses are called "allowable expenses." Next, the provision requires any insurance policy which does not contain the anti-duplication clause to pay all its benefits before the plan containing the clause becomes liable for any additional sum needed to satisfy charges for allowable expenses.

When both plans owned by the single insured contain the clause, a three step priority prescribes the sequence of payment liability:

—The plan covering the patient as an employee pays before the plan covering the patient as a dependent.

—The plan covering the patient as a dependent of a male person pays before the plan covering the dependent of a female person.

—Where the order of payment cannot be determined in accordance with these rules, the first plan to make payment will be the one that has covered the insured for the longer period of time.

III

The arguments of the insurance industry for the anti-duplication provision center on "economic wastage" and inflated insurance costs. The Health Insurance Council published a statement that "the over-insured person very often may actually demand unnecessary medical services of various kinds." It is suggested that hospitals are thus over utilized with longer patient stays and even that "certain types of elective surgery such as tonsillectomies have been performed primarily for insurance purposes."

On the other side of the coin, it may be said that the inflated cost argument is fallacious in that each health insurance group is actuarially and organically self-sufficient, and under no circumstances does the experience of one adversely affect the other, even when the claimant in each group is the same individual. It is also pertinent to recognize that the same insurance companies which are now raising the roof over duplicate health insurance are aggressively engaged in encouraging and selling "duplicate" life insurance. Not a whisper has so much as been uttered about John Doe's owning two or more life insurance policies or about his widow's collecting "double benefits" after his demise.

Finally, there is possibly a legal as well as economic aspect to the anti-duplication provision. Where competing insurance companies combine to lower benefits to the economic advantage of each, a question is sure to arise as to just how free the market really is. Some may suggest that this approaches a combination in restraint of trade or even a monopoly.

IV

An overwhelming majority of American physicians support the voluntary health care financing concept. They offer their patients administrative services in completing claims forms and reports so that insurance benefits may be paid. In the final analysis, the physician is serving his patient, and ultimate responsibility for payment reposes with the recipient of the care. To involve the physician in a melee of insurance economics is not merely without logic and justification, but it also would diminish the time he has available to devote to his patients.

It appears that the insurance industry has an obligation to make a stronger case by presenting facts and figures on over-insurance, the extent of "economic wastage," and the ratio of demonstrable abuses to the whole of its enormous business. In fact, it would be helpful if the matter were formally presented to medicine, for never once

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"I'm having trouble with his hearing."

has the Mississippi State Medical Association been approached on anti-duplication or subrogation.

The insurance industry knows that medical organization offers not only its good offices and means for processing grievances but its resources for research and study in health care financing as well. Anti-duplication can hardly be viewed as a popular undertaking, and its fundamental premise seems to oppose the vigorous effort so long exerted by the insurance industry in health insurance promotion.—R.B.K.

A Better Generation of Medical Students

America's 88 medical schools—the University of New Mexico opened this year—have had more and better applicants for admission than ever before. Reporting on total applications, acceptances, and MCAT (Medical College Admission Test) scores, the Association of American Medical Colleges paints an optimistic picture of the profession's next generation.

In the 1963-64 academic year, more than 17,600 young men and women filed over 70,000 applications for medical school. The institutions accepted 9,063, a ratio of 1:1.95, up 50 per cent from 1947-48. In mean MCAT scores, the new first year enrollees are sharper in the test's four categories, verbal, quantitative, general information, and science. Those accepted showed academic improvement of 1 to 6 per cent over medical students admitted a decade ago. Even the rejectees improved, some by even greater percentages than the successful applicants.

Geographically, the best qualified applicants are in the northeastern states, with the western, north central, southeastern, and south central regions following in that order. But the desirability differential among the students varied only about 5 per cent, so there was no significant breadth in the spectrum. Moreover, it is difficult to measure qualifications of applicants regionally, since many students seek admission to schools in all regions, thereby causing distortion of area standings.

In 15 years, the ratio of applicants to those accepted has narrowed from 1:2.89 down to 1:1.95, yet the learning capacity and preparation of all potential medical students has concomitantly increased. Admissions committees can well afford to be highly selective, AAMC points out, leaving unsaid that there is no place in medicine for the unprepared. All of which points to a bright picture in American medical education.—R.B.K.

Ability Is What Counts

Observance of National Employ the Physically Handicapped Week last month put the accent on ability—largely through the skills and new knowledge of medicine which are shrinking the definition and spectre of disability. More than ever, employers seem less reluctant to hire the handicapped, and their old fears of increased workmen's compensation liability exposure appear to be lessening.

With infrequently occurring exceptions, the productivity and dependability of handicapped workers are comparable to those free of impairment. A New Jersey electronics firm hires the handicapped exclusively, and it not only manages to compete transistor-for-transistor with similar organizations, but it also shows a nice profit on the balance sheet. Even its president, an obviously able executive, does his work from a wheel chair.

More people are beginning to realize that disability has become a relative thing and that residual ability offers developmental potentials once believed impossible. So it's only fair to recognize that society, with a strong assist from enlightened medical, industrial, and civic leadership, is learning that useless legs do not necessarily connote total uselessness.

The late Gen. Hoyt Vandenberg, when chief of staff of the U. S. Air Force, once remarked that everyone had some disability which bore little relation to existing and potential ability in the same individual. He liked to call himself totally disabled with respect to operation of high performance aircraft while reminding his listeners that he was probably a little better general officer as a result.

Physicians have a rare opportunity in consolidating this progress, for they can articulate this amazing story from the unique position of those who have made it possible. And what better achievement can we all seek than to help restore usefulness, self-sufficiency, and a meaning of life to individuals once regarded as lost?—R.B.K.

PERSONALS

THERESA L. R. BUCKLEY has announced the opening of her offices in Biloxi for the practice of ophthalmology. Dr. Buckley is a graduate of the Marquette University School of Medicine and completed her postgraduate training at the Veterans Administration Hospital in Wood, Wisc., and at the Milwaukee Children's Hospital.

WALLACE E. CALHOUN has been elected president of the Moss Point School Board. Dr. Calhoun has served on the board for the past two years.

LAWRENCE W. LONG of Jackson has been named to the International Board of Governors of the International College of Surgeons for a two year term beginning Jan. 1, 1965.

A. K. MCMILLAN of Lucedale was honored for his service to William Carey College with the dedication of the new student center in his name. Dr. McMillan has served on the college's Board of Trustees for many years.

WILLARD PARSONS has been elected to honorary membership in the Lebanese chapter of the American College of Surgeons. Notification of the honor came from Dr. Saud Ellissa of Beirut, Lebanon, secretary of the first chapter of the American College of Surgeons to be organized in that area. The Parsons visited in Beirut on a recent world tour.

JAMES W. SANDERS, III of Meridian has been certified as a diplomate of the American Board of Obstetrics and Gynecology. Dr. Saunders is a graduate of the Louisiana State University Medical School and interned at the U. S. Naval Hospital in Pensacola, Fla. He completed his residency at the Navy hospital at Philadelphia, Pa., and was for two years the chief of obstetrics and gynecology at Guantanamo Bay, Cuba.

State Morbidity Reported Through Oct. 2

The Mississippi State Board of Health reports the following occurrence of morbidity for 1964 through the 40th week of the year, ending Oct. 2, 1964. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	768
Tuberculosis, O.F.	175
Salmonella infections	40
Brucellosis	2
Encephalitis, infectious	22
Typhoid Fever	2
Dysentery	
Bacillary	55
Amoebic	10
Dysentery, N.O.S.	2
Food Poisoning, N.O.S.	5
Diphtheria	5
Septicemia, Staph.	19
Septicemia of newborn	1
Diarrhea of newborn	1
Septicemia, N.O.S.	9
Meningococcal infection	22
Meningitis, O.F.	31
Gastro-enteritis	1
Tularemia	5
Mononucleosis, infectious	63
Toxoplasmosis	1
Hepatitis, infectious	196
Hepatitis, serum	1
Tetanus	4
Poliomyelitis	1
Helminthic infections	
Hookworm	894
Ascariasis	255
Strongyloides	54
Histoplasmosis	16
Sepsis, puerperal	2
Rheumatic fever	2
Moniliasis	1
Adenovirus	1
Mycotic, N.O.S.	1
Other inf. and parasitic diseases	1
Streptococcus infections	
Scarlet fever	125
Strep throat	2,667
Taeniasis	8
Pertussis	109
Measles	6,689
Chickenpox	1,050
Mumps	918
Other Cestode Infestations	11
Influenza	379
Gonorrhea	4,105
Syphilis	
Early	376
Late	125

DEATHS

HOUSTON, BOBBY JACK, Jackson. M.D., University of Mississippi School of Medicine, Jackson, 1961; interned Mississippi Baptist Hospital, Jackson, one year; died Aug. 2, 1964, aged 32.

MCRAE, KENNETH FRANCIS, Booneville. M.D., Memphis Hospital Medical College, Tenn., 1902; interned Memphis City Hospital, Tenn., one year; died Sept. 22, 1964, aged 95.

Drs. Massengill and Pharr Head G.P.'s; Academy Meets for 16th Annual Assembly

Dr. Max Pharr of Jackson was named president-elect and Dr. Frank C. Massengill of Brookhaven was inaugurated president during the Sept. 23-24 meeting of the Mississippi Academy of General Practice. Dr. Massengill succeeds Dr. Lawrence Brisco of Tupelo.

Officers of the Mississippi Academy of General Practice are shown with Dr. Amos N. Johnson, president-elect of the American Academy of General Practice, second from right. From the left are Drs. Frank C. Massengill, incoming president, Dr. Lawrence H. Brisco, outgoing president, Dr. Johnson, and Dr. William E. Lotterhos, delegate to AAGP.

Incoming vice president is Dr. Thomas Braddock of West Point, and Dr. Albert Gore of Jackson is secretary-treasurer. Elected as delegate to the American Academy of General Practice was Dr. John B. Howell of Canton with Dr. John Roy Bane of Jackson as alternate.

Newly named directors include Dr. Joseph E. Johnston of Mount Olive, Dr. Ben Banahan of Jackson, Dr. R. J. Moorhead of Yazoo City, Dr. John Longest of Starkville, and Dr. Joseph Guyton of Pontotoc.

During the Sept. 23 business session the academy adopted a motion providing for a committee to study the feasibility of having a full time executive office and a full time secretary. This committee is to report to the MAGP Board of Directors.

Dr. Pete H. Rhymes of Philadelphia, a MAGP director and program chairman of the 1964 assembly, moderated the opening session on Sept. 23. Speakers included two New Orleans physicians, Dr. G. Gordon McHardy, clinical professor of medicine, L.S.U. School of Medicine, who discussed "Diverticulitis," and Dr. Silas E. O'Quinn, assistant professor of dermatology, L.S.U. School of Medicine, who talked on "Cutaneous Manifestations of Systemic Disease."

Moderator for the afternoon program was Dr. Robert L. Holley of Oxford, an MAGP director. Guest essayists for the afternoon session were Dr. Vincent P. Collins of Houston, Texas, professor of radiology and chairman of the department, Baylor University, who spoke on "Radiological Evaluation of Low Back Trouble," and Dr. McHardy who discussed "Hiatal Hernia."

The annual banquet and dance closed the first day's activities.

Dr. Joe L. Guyton of Pontotoc, an MAGP director, moderated the Sept. 24 morning session. Dr. Charles E. Horton of Norfolk, Va., plastic surgeon and president-elect, Southeastern Society of Plastic Surgeons addressed the session on "Office Plastic Surgery." Dr. William G. Crook of Jackson, Tenn., discussed "Recognition and Management of the Allergic Child in General Practice." Dr. Zolton Petrany of Houston, Texas, assistant professor of radiology, Baylor University College of Medicine, talked on "What Comprises a Complete and Satisfactory Examination of the Spine—Radiologic Aspect."

Guest speaker for the luncheon was Dr. Amos N. Johnson of Garland, N. C., president-elect of AAGP.

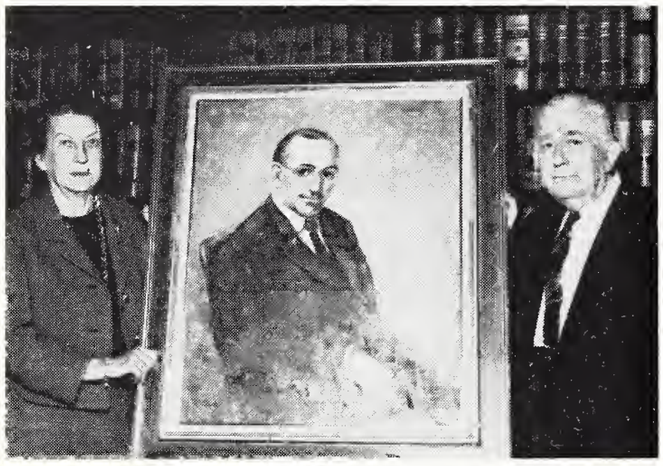
During the afternoon session Dr. Horton continued his discussion of "Office Plastic Surgery,"

and Dr. Crook talked on "The Allergic-Tension-Fatigue Syndrome." Dr. O'Quinn of New Orleans reviewed "The Problem of Drug Reactions in Everyday Practice." Moderator was Dr. Thomas N. Braddock of West Point.

The meeting concluded with a directors meeting.

Portrait of Dr. Evans Presented to State

The portrait of the late Dr. William Augustus Evans of Aberdeen was formally accepted by Mrs. Julia Bayliss Starnes, state librarian, on Oct. 12, and will be hung in the State Law Library. The presentation was made by Dr. W. H. Anderson of Booneville, a close friend of Dr. Evans.



Mrs. Julia Bayliss Starnes, state librarian, accepts the portrait of the late Dr. William Augustus Evans from Dr. W. H. Anderson of Booneville. The portrait will hang in the State Law Library.

Dr. Evans, a native Alabamian who early in life moved with his family to Aberdeen, Miss., was a prominent physician, historian, and author. He was in the first graduating class of A & M College, now Mississippi State University. He was also a graduate of Tulane University where another portrait of him hangs. After completing his degree at Tulane he studied a year abroad.

In 1885 he returned to Aberdeen to practice medicine with his father until 1891. In 1886 he was elected vice president of the Mississippi State Medical Society. In 1888 he served as medical quarantine officer during a small outbreak of yellow fever in Jacksonville, Fla. and was placed in charge of a receiving and examining district at the Mississippi-Alabama line near Gattman, Miss. This was his first public health work. In 1891 he went to Chicago where he became nationally and internationally known for his accomplishments in public health.

From 1891 to 1908 he served as professor of pathology in the Medical School of the University of Chicago. He served as professor of public health at Northwestern University Medical School from 1908 to 1928. When Mayor Fred A. Busse took office in January 1907, Dr. Evans became Health Commissioner of Chicago, unanimously selected by the City Medical Profession. He pioneered in pure water and milk laws. In 1911 he began the first syndicated health column in America, called "How to Keep Well." During these years Dr. Evans was recipient of many degrees and honors. Many of these are listed in *Who's Who in America.*

While Dr. Evans won fame and fortune in Chicago, he came back to the scene of his boyhood to spend his last days working for Aberdeen's advancement. Historical research had been Dr. Evans life-long hobby and after some traveling he began devoting his time to the history of Monroe County and Mississippi. His *Mother Monroe,* a history of the County from 1820 to about 1886, appeared serially in the *Aberdeen Examiner.* He assembled materials about and by Major S. A. Jonas, author of *Lines on the Back of a Confederate Note* and founder of the *Aberdeen Examiner.*

With the help of Boy Scouts and friends he compiled a record of every marked grave in Monroe County. He had the route of Gaines Trace marked through Monroe County. Through his efforts the Henry Greer Home (Lowndes County) where Monroe County was organized was marked. He erected a monument at Hamilton, the site of the first courthouse in Monroe County. He wrote a history of the First Baptist Church of Aberdeen. During his years of retirement, Dr. Evans gave speeches at hospitals, luncheons, graduations, medical conventions, and college and high school assemblies. He served as a consultant on the State Board of Health. From 1940 to 1944 he gave time, money, and effort to aid the United Daughters of the Confederacy in restoring and making a shrine of Beauvoir the home of Jefferson Davis in Biloxi. A major undertaking of his was the organization of the MSMA Fifty Year Club.

When Dr. Evans retired, Aberdeen had a small library in a room in the City Hall, begun and maintained by the Aberdeen Woman's Club. To this library he had made contributions through the years, and in 1938 he made it possible for there to be traveling book collections for both

white and colored county schools. A similar service was given the Monroe County Home Demonstration Clubs. In 1938-1939 he and his family had constructed for Aberdeen the library which became known as the Evans Memorial Library. He continued to help assemble an abundance of source material for the library files. In 1940 he built a library for Negroes in Newberger Park in Aberdeen. Upon his death in 1948 Dr. Evans left the library a generous bequest for maintenance. Each year on August 5, the birthday of Dr. Evans, the library observes "Local History Preservation Day."

In the presentation of the portrait to the state, Dr. Anderson said, "Dr. Evans was a native of Aberdeen but in truth he was a citizen of the world."

Dr. Beech Receives Fifty Year Insignia

Dr. Thomas R. Beech of Laurel received the pin and plaque signifying membership in the Fifty Year Club at a recent meeting of the South Mississippi Medical Society. Dr. James C. Bass, society president, made the presentation.

Dr. Beech received his medical training at Emory University and began practice in Ellisville in 1919. He was formerly superintendent of South Mississippi Charity Hospital and became affiliated 21 years ago with the Masonite Clinic where he still practices.

The meeting was held on the campus of Ellisville State School.

State Surgeons Hear Dr. Dragstedt

Mississippi surgeons met Sept. 25 for the annual meeting of the Mississippi Chapter, American College of Surgeons.

Guest essayists for the day-long program included Dr. Lester R. Dragstedt, research professor of surgery at the University of Florida. Prior to his retirement from the University of Chicago, Dr. Dragstedt was professor and chairman of the department of surgery. He is Thomas D. Jones Professor of Surgery Emeritus at Chicago.

Dr. Dragstedt has been widely acclaimed for his scientific accomplishments and has received such awards as the Silver Medal and the Distinguished Service Award from the American Medical Association.

Two other visiting lecturers were Dr. Robert A. Ross, chairman of the department of obstetrics-gynecology, University of North Carolina, who spoke on cancer in women, and Dr. Brian H. McCrachen, associate professor of medicine at Tulane, who spoke on kidney failure.

The Mississippi Chapter, American College of Surgeons, met Sept. 25 at the University Medical Center for its 1964 annual meeting. Dr. Richard J. Field, Jr., of Centreville, far left, outgoing president, is shown with the new officers (from left to right), Dr. George F. Archer of Greenville, president; Dr. Jesse T. Davis of Corinth, vice president, and Dr. William O. Barnett, associate professor of surgery, University of Mississippi School of Medicine, secretary-treasurer.

Mississippi surgeons who discussed cases were Drs. Richard J. Field of Centreville; Dr. George F. Archer of Greenville; Dr. Harvey Johnston, Jr., of Jackson; Dr. George H. Martin of Vicksburg; Dr. J. T. Davis of Corinth, and Dr. Charles E. Guice of Hattiesburg.

New officers elected during the chapter's business session include Dr. George F. Archer of Greenville, president; Dr. J. T. Davis of Corinth, vice president, and Dr. William O. Barnett, of Jackson, secretary-treasurer. Dr. Richard J. Field of Centreville is the outgoing president.

Natchez Story Told In 'Medical Economics'

The story of how Natchez, a town of 25,000, secured a mental health clinic and the services of a psychiatrist is told by Dr. Phil K. Springer in the Sept. 21 issue of *Medical Economics*.

Dr. Springer, a general practitioner, and the two other members of his committee, Dr. John Davis, an internist, and Dr. Donald Killelea, a pediatrician, began their efforts with the State

Board of Health. They sold the Board on their plans and received the promise of $3,000 a year—provided the amount was matched locally. Local officials pledged $1,500, the local Mental Health Association promised another $1,000, and other groups pledged the rest of the support.

Space was found in the County Health Department for the clinic and the services of a young psychiatrist, Dr. Jack L. Anderson, were secured. Today, Dr. Anderson sees about 45 patients a week on a schedule which includes two days a week in the clinic and the rest devoted to private patients. He reports that he is "making a good living in Natchez and looking ahead to an interesting future."

Concluding the six page article, Dr. Springer writes, "I'm sure that many another place with 25,000 population—or 20,000 or even 15,000—can acquire a psychiatrist and set a successful mental health program in motion. There's no reason for the Natchez example to be unique."

Dr. Howell Inducted Into Fifty Year Club

Dr. Joel W. Howell of Durant received the Fifty Year Club pin and plaque during a recent meeting of the North Central Medical Society. Dr. A. A. Derrick, Jr., made the presentation.

An Emeritus member of MSMA, Dr. Howell was graduated from the University of Tennessee College of Medicine in 1910 and interned at St. Joseph Hospital in Memphis. Prior to opening his practice in Durant, he practiced for 13 years in French Camp.

Guest essayist for the society's scientific program was Dr. Wilfred Cole who spoke on "Recognition of Allergy in Pediatrics."

Dr. Parsons Elected ACS Vice President

Dr. Willard H. Parsons of Vicksburg was named first vice president of the American College of Surgeons during the group's October annual meeting in Chicago. Dr. Howard A. Patterson of New York City was named president.

Among the 1,125 surgeons inducted as new Fellows of the ACS were these Mississippians: Dr. Cedric J. Priebe, Jr., USAF, Biloxi; Dr. David H. Draper, USAF, Keesler AFB; Dr. Raymond W. Browning, Greenwood; Dr. Richard H. Clark, Jr., Hattiesburg; Dr. William R. Fain, Jackson, and Dr. Hugh S. Rayner, Meridian.

Beginning its second half-century, the ACS is a voluntary, educational, scientific, and nonprofit association of surgeons founded in 1913 for the sole purpose of improving care of the surgical patient. The College has grown from a founding group of 450 surgeons of Canada and the United States to a total international membership of approximately 26,000 Fellows in 83 nations.

AMA Members Asked For Journal Choice

The American Medical Association has requested the Mississippi State Medical Association to report annually each AMA dues-paying member's choice of AMA specialty journals for 1965.

Each dues-paying AMA member is entitled to receive one of the ten AMA specialty journals as a benefit of membership in the American Medical Association. In addition, all members receive the *Journal AMA,* the *AMA News,* and *Today's Health.*

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"My doctor says I'm in perfect physical condition. Just think! Anything *could happen to me!"*

The MSMA headquarters Office requests that each dues-paying member of AMA report his choice of specialty journals to his local society secretary when remitting his 1965 dues or furnish this information directly to the MSMA Central Headquarters Office Building, P. O. Box 4606, Jackson.

AMA's ten specialty journals include *AMA Journal of Diseases of Children, Archives of Dermatology, Archives of Environmental Health, Archives of General Psychiatry, Archives of Internal Medicine, Archives of Neurology, Archives of Ophthalmology, Archives of Otolaryngology, Archives of Pathology, Archives of Surgery.*

Cancer Society Names Dr. Bell President-elect

Dr. Warren Bell of Jackson was named vice president and president-elect of the Mississippi Division, American Cancer Society, during the organization's Sept. 17 meeting in Jackson.

Dr. Richard Burman of Gulfport was inaugurated as president, and Mrs. M. C. Doughtery of Tupelo and Sebe Dale of Columbia were named to vice president posts. A. Ray Tillman of Jackson was elected treasurer and John Milandin of Pascagoula was chosen chairman of the board of directors.

William Gargan, the stage, screen, and TV personality who was stricken with cancer four years ago was featured speaker for the day long meeting. Other addresses included a talk by Dr. Ralph R. Braund, director of the West Tennessee Cancer Clinic at Memphis on "The Problem of the Terminal Cancer Patient" and the president's address by Dr. A. V. Beacham of Magnolia.

Other items on the agenda were the annual business session and the presentation of awards.

UMC Schedules Postgraduate Events

Postgraduate events slated at University Medical Center during the current academic year include a Cancer Seminar on Dec. 2, which is being planned by UMC postgraduate education committee and the professional education committee of the American Cancer Society, Mississippi Division, headed by Dr. Robert Q. Marston, UMC director.

Another Gas Chromatography Workshop is on the docket for Nov. 13 and 14, a sequel to the first such event planned by the biochemistry department and Dr. Hal White, associate professor, last year.

The Cardiovascular Seminar dates are March 31 through April 2 this year. Mississippi Heart Association will sponsor the seminar for the 12th straight year in cooperation with the UMC postgraduate education committee.

Blood Bank Workshop Is Set for 1965

Planning a workshop on blood banking and transfusion services for hospital personnel are representatives of the state medical and hospital associations. From the left are Dr. Thomas F. Puckett of Hattiesburg, Mr. Chandler Clover, Dr. Kenneth M. Heard, and Mr. Charles W. Flynn of Jackson. Dr. Heard is chairman of MSMA's Committee on Blood and Blood Banking which met in October. The workshop is scheduled for 1965 at Jackson.

AMA-ERF Opens Fall Campaign

The American Medical Association Education and Research Foundation has opened its fall campaign for contributions. The Mississippi campaign is being conducted by an MSMA committee, headed by Dr. Raymond Grenfell of Jackson, in cooperation with the University of Mississippi School of Medicine.

According to Raymond M. McKeown, of Coos Bay, Ore., president of the AMA-ERF Board of Directors, one out of every seven students, interns and residents in the United States now secures

financial assistance from the fund. The fund now guarantees nearly $23.2 million in loans.

During the past year, said Dr. McKeown, the Fund has guaranteed an average of about $700,000 a month in loans. This represents nearly $1,000 per hour, 24 hours a day.

Students, interns, and residents may borrow up to $1,500 per year to a total of $10,000 to finance their medical education and essential living expenses. They repay their loans after completing medical training, taking up to 10 years for retirement.

The Loan Guarantee Program enables participating banks to extend $12.50 in long-term loans for every dollar in the fund. For example, to guarantee a loan of $1,000, the Foundation must have $85 in the guarantee fund.

To maintain the current rate of loans, Dr. McKeown said, approximately $60,000 in contributions from physicians and other sources must be added to the fund each month.

The fact that a student borrows from a bank, pays interest, and eventually repays the loan means that the fund continually revolves, pointed out Dr. McKeown. He estimated that sometime within the next four years no more contributions will be needed because repayments will balance the loans being made.

Physicians wishing to contribute to AMA-ERF should make their checks payable to the AMA-Education and Research Foundation, 535 North Dearborn St., Chicago 10, Ill. Contributions may be earmarked for the Loan Guarantee Program or the Funds for Medical Schools Program. If marked for the Funds for Medical Schools Program, they may be designated for a specific school or given without designation.

UMC Adds Neurology Course

A course in clinical neurology has been added to the postgraduate schedule for 1964 of the University of Mississippi School of Medicine. This is the first year physicians in this state have been offered a seminar on this subject.

Dr. Robert D. Currier, associate professor of medicine and chief, division of neurology, is planning the two-day course on Oct. 29-30 at the Medical Center.

Guest lecturers will be Dr. Douglas Buchanan, professor of pediatrics at the University of Chicago; Dr. Russell N. DeJong, professor of neurology and chairman of the department at the University of Michigan Medical School, and Margaret Knott, coordinator of patient services at the Kaiser Foundation Rehabilitation Center in Vallejo, Calif.

Emphasis will be on the neurological examination, methods of diagnosis, and degenerative diseases in children and adults. The guest neurologist will discuss neurological examination of adults, adult seizures, Parkinsonism and allied disorders, while the pediatrics authority will talk about the examination and seizures in children, along with degenerative diseases of the nervous system in infancy and childhood.

Miss Knott, a physical therapist, will describe proprioceptive neuromuscular facilitation. She is co-author of a book on this subject.

Faculty members from the university will cover such diagnostic techniques as skull and spine x-rays, arteriography, pneumoencephalography and myelography, isotope brain scans and echoencephalography, electroencephalogram, electromyogram, and nerve conduction. They'll talk about clinical management of such problems as seizures with case presentations, senile and presenile brain diseases, dystrophy and associated diseases, multiple sclerosis and amyotrophic lateral sclerosis.

The seminar has the support of an educational grant from the Neurological and Sensory Diseases Service of the Division of Chronic Diseases, Bureau of State Services, U. S. Public Health Service. There will be no tuition for physicians and ancillary members of the health team who attend. The Mississippi Academy of General Practice has been asked to approve 12 hours of Category 1 credit for full attendance.

Arthritis Seminar Moved to Nov. 12

The fourth annual Arthritis Seminar at the University Medical Center is set for Nov. 12, 1964—rescheduled from the February 1965 date orignally planned.

Among the visiting authorities who have accepted invitiations to speak are Dr. L. D. Amick, chief of the division of physical medicine and rehabilitation at the University of Tennessee; Dr. John G. Kuhns of Boston, Mass., lecturer in orthopedic surgery at Boston University and orthopedic surgeon in chief emeritus at the Robert B. Brigham Hospital; Dr. Charles H. Slocumb, senior consultant in medicine at the Mayo Clinic, Rochester, and Dr. Otto Steinbrocker, chief of the department of rheumatology at Lenox Hill Hospital, New York City.

Dr. Frederic C. McDuffie, associate professor of medicine, is program coordinator.

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SIDE EFFECTS: Dryness of mouth, blurred vision, urinary difficulties, and constipation are rarely troublesome and may generally be controlled by reduction of dosage. Other side effects associated with the use of anticholinergic drugs include tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash.

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1964-65 Circuit Courses Begin State Swing

The sixth Circuit Course swing to the north began in Tupelo on Oct. 21 and in Greenwood on Oct. 22. Two more courses will follow at weekly intervals in North Mississippi Community Hospital of Tupelo on Wednesdays at 7:30 p.m. and at Greenwood Leflore Hospital on Thursdays at 7:00 p.m.

Lecturers will go out from the Medical Center departments of surgery, medicine, psychiatry, obstetrics-gynecology, and pediatrics. Local chairmen coordinating arrangements are Dr. Malcolm Moore of Tupelo and Dr. Howard Nelson of Greenwood.

On Session I surgery topics for discussion will be peptic ulcer, reading problems in children, and vascular trauma. Surgery lecturers will be Dr. William O. Barnett, associate professor; Dr. Samuel Johnson, clinical associate professor, and Dr. Hilary Timmis, assistant professor.

In January an entirely new series of lectures will be presented in south Mississippi. Howard Memorial Hospital in Biloxi will host the lectures at dinner meetings on Jan. 13, 20, and 27. In Hattiesburg, the Methodist Hospital will sponsor dinner meetings on Jan. 14, 21, and 28. Chairmen are Dr. Eldon L. Bolten of Biloxi and Dr. A. T. Tatum of Petal.

The Central Circuit Courses will include Natchez and Meridian starting on March 3 and 4, with Dr. Philip K. Springer of Washington and Dr. Guy T. Vise of Meridian in charge.

A special circuit for Laurel has been arranged at bimonthly intervals to correspond with Jones County Medical Society meetings, at the request of physicians in that area. Dates are Nov. 10, Feb. 9 and May 18. Dr. J. Manning Hudson, clinical assistant professor of medicine, will talk about factors affecting PBI values, and Dr. Frederic C. McDuffie, associate professor of medicine, will discuss gamma globulin in health and disease at the Nov. 10 meeting.

The Circuit Courses are planned each year by the postgraduate education committee of the School of Medicine with the cooperation of the Mississippi State Medical Association and the Mississippi Academy of General Practice which grants 11 hours of Category 1 credit to members who attend all sessions.

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Chest Physicians Announce Contest

The American College of Chest Physicians offers three cash awards to be given annually for the best essay prepared by undergraduate medical students on any phase of the diagnosis and/or treatment of chest diseases (heart or lungs).

The First Prize will be $500; Second Prize, $300 and Third Prize, $200. Each winner will also receive a certificate of merit. A trophy inscribed with the name of the winner and the name of his school will be presented to the winner's school.

Since these essay contests were initiated in 1950, cash prizes totaling more than $12,000 have been awarded to students in many parts of the world.

The winners will be announced at the 31st Annual Meeting of the American College of Chest Physicians, to be held in New York, June 17-21, 1965.

The official application form, sample copies of the journal, and additional information may be secured by writing Mr. Murray Kornfeld, Executive Director, American College of Chest Physicians, 112 East Chestnut St., Chicago, Ill. 60611.

Dermatologists Set Annual Meeting

The American Academy of Dermatology will hold its 23rd annual meeting in Chicago, Dec. 5-10. The meeting will take place in the Palmer House.

The six-day meeting, which more than 1,300 dermatologists and other physicians are expected to attend, will include scientific presentations on new developments in skin disease and dermatology research. Symposia on major skin problems and special guest lectures will complete the program.

Inquiries concerning the meeting may be made to Dr. Stanley E. Huff, 636 Church St., Evanston, Ill.

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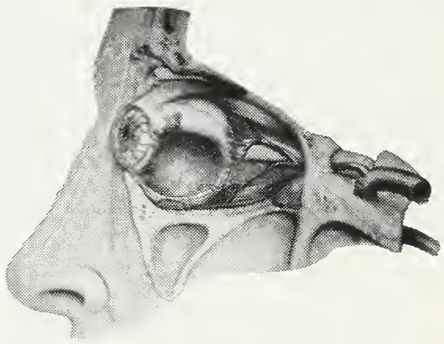

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Volume V
Number 12
December 1964

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The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, $5 per annum; $1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

December 1964

Dear Doctor:

The overwhelming liberal lineup in the new 89th Congress has fedicare proponents licking their collective chops over enactment prospects. Democrats picked up a net of 37 House seats, and three anti-fedicare Republicans on key Ways and Means Committee, before which such legislation must come, lost. Topping this off, LBJ says fedicare is number one domestic issue.

> Chief liberal loss in drug-medical legislation was Rep. Kenneth Roberts (D., Ala.), House health committee chairman. Interesting footnote is that Roberts, one time sponsor of "little Forand bill," shot on House floor in 1948 by Puerto Ricans, was saved by then-Rep. Walter Judd, a physician.

Louisiana chiropractors will have to do their advertising other than in the telephone book, a New Orleans district judge ruled. In a class action brought by the Louisiana State Board of Medical Examiners, the court enjoined the cultists "from seeking any listing or designations using the words 'chiropractor or chiropractic'...in the white or yellow pages of Southern Bell Telephone and Telegraph Company directories."

The new British Labour government's "emergency" 15 per cent import tax will cost the U.S. pharmaceutical industry heavily. Tax applies to everything imported into United Kingdom except foods, unprocessed tobacco, and raw materials. Drug makers had sales of $7.4 million to Britain in 1963, so tax at old rate would be $1.1 million.

There are more semi-private beds than any other type in U.S. hospitals, so says American Hospital Association in new studies. Since 1960, gross totals of single private, three, four, five, and six-or-more bed units have decreased in favor of two-bed semi-private accommodation. Such units now account for 49.2 per cent of all beds.

AMA-ERF's new Biomedical Research Institute will open July 1, 1965, in the expanded AMA headquarter building at Chicago. Most activity will be in area of pure research in life sciences, and work will be directed by an advisory committee of distinguished scientists.

Sincerely,

Rowland B. Kennedy
Executive Secretary

Missouri Down-Thumbs California D.O.'s-Turned-M.D.'s

Springfield, Mo. - In the first court test since the marriage of osteopathy to medicine in California, another state has refused to license a D.O.-turned-M.D. by former's law. Two California practitioners applied for licensure in Missouri, also noted for liberal health practice laws, but were refused in that they did not attend a medical school. New California law permits D.O.'s to obtain M.D. "diploma" from converted California College of Medicine.

Empire State Studies Employment Of Cardiac Patients

Albany, N.Y. - Employment barriers facing individuals who have recovered from heart attacks will be studied in a new research project under the N.Y. State Department of Health. Syracuse University will probe difficulties which are believed to be economic, legal, and social rather than medical. Object is to identify employment problems for post cardiacs and modify or eradicate them. Included will be analyses of compensation, insurance, and liability aspects of study area.

Americans Have Widest Choice Range Of Insurance And Prepayment

New York - Any U.S. citizen in any state can choose voluntary health care financing from a minimum of more than 100 insuring organizations. The Health Insurance Institute said that licensed carriers in field ranged from a low of 130 in Alaska to a high of 479 in the biggest-of-everything, Texas. More than 145 million are now covered, 88.1 million by insurance, 61.7 million by Blue plans, and 7.2 million by other plans. Aggregate includes known duplicate coverage.

Hospital Costs Increase Steadily

Chicago - Overall hospital care costs have risen 314 per cent from 1946 through 1963, new studies from the American Hospital Association show. Biggest factor is labor - rising 545 per cent - claiming 70 cents out of each dollar now paid for service. During period of survey, per diem average rose to $38.91 from $9.39, and admissions to nonfederal general hospitals increased to 25.3 million from 13.6 million annually.

Court Disagrees On Suicides Of Mental Patients

New York - In two separate decisions by the same appellate court, one mental hospital was absolved of blame for suicide of a patient while another institution was held liable for the same cause. In a private hospital, a patient hanged herself, and although diagnosed as a schizophrenic among whom suicide rate is high, institution was held blameless. State of N.Y. was held liable for suicide of escaped patient from public hospital after he threw himself under a bus. Both cases were in supreme court this year.

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
December 1964, Vol. V, No. 12

Maternal Mortality in Mississippi: The First Five Year Report 1957-1961

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Jackson, Mississippi

A summary is presented of data obtained by the Committee on Maternal and Child Care in the first five years of their study of maternal deaths in Mississippi (from 1957 to 1961). The author reviews the Committee's methods of study, and the results found. He notes that a gratifying decrease in the total number of maternal deaths and in deaths from hemorrhage is observed as well as a reduction in the proportion of direct obstetric deaths and avoidable deaths. However, he points out that the management of toxemia and infection and the provision of adequate antepartal care and delivery facilities are still pressing problems in Mississippi.

When the Committee on Maternal and Child Care began its study of maternal deaths in Mississippi in 1957 it had several objectives in mind. The first was to analyze the common causes of death in the state, the second to disseminate the results of the study among physicians and hospitals, and the third to point the way for improvements in maternal care so that the number of deaths might be lessened. The first five years of this study have been completed, and it is now appropriate to review the committee's work, to determine how far its aims have been fulfilled and to plan its course for the future.

METHODS

Techniques of obtaining and reviewing information on maternal deaths have not changed appreciably during the five years of study. The questionnaire type of inquiry has been exclusively employed. No "on the spot" investigations of hospital records or interviews of physicians or hospital personnel have been conducted except under rare circumstances involving hospitals in Jackson. The data sheet used was developed by the committee before the study began and has undergone only minor changes since then. One of the data sheets, together with a letter from the chairman of the committee, is sent to the physician who last attended the patient. He is asked to complete and return the data sheet and add any pertinent information in a supplementary note. If he does not reply two follow-up letters are sent at appropriate intervals. Rarely, and in particularly interesting cases, personal attempts have been made by members of the committee, the

Chairman, Committee on Maternal and Child Care. Committee Members, 1957-1961—W. W. Barnard, M.D., Clarksdale; Ralph L. Brock, M.D., McComb; A. L. Gray, M.D., Jackson; Frank C. Massengill, M.D., Brookhaven; Howard A. Nelson, M.D., Greenwood; W. E. Noblin, M.D., Jackson; H. C. Ricks, Jr., M.D., Jackson; Jo N. Robinson, M.D., Columbus; Margaret P. Veller, M.D., Natchez; William B. Wiener, M.D., Jackson. Consultants—Curtis W. Caine, M.D., Jackson (Anesthesiology); Catherine G. Goetz, M.D., Jackson (Pathology); J. Manning Hudson, M.D., Jackson (Internal Medicine).

State Board of Health, or officers of the Association to obtain information. During the last year and one-half of the study letters requesting additional information have occasionally been sent to the responding physician by the committee, if it seemed likely that he could supply further information which might be of value.

Following receipt of the data sheet and other information all identifying marks are removed so that anonymity is preserved. A copy of the data sheet is then sent to a member of the committee for review prior to the next meeting. At the quarterly meeting of the committee the case is summarized by the member who has studied and evaluated it according to the criteria set out in the AMA "Guide for Maternal Death Studies." The evaluations are discussed by the committee, agreed to or voted on if there is a division of opinion, and finally entered in the committee's records.

Several methods have been employed by the committee to spread the information obtained from their study. From time to time illustrative case reports, written by committee members, have been published in the Association's JOURNAL. Annual reports have been compiled by the chairman and the central office and published in the JOURNAL. Finally, interesting cases have been presented in conjunction with the Mississippi Obstetrical and Gynecological Society at luncheons at the annual meetings of the Association. As far as the individual responding physician is concerned, the committee has developed the practice of sending him a résumé of the committee's findings after the meeting at which the case has been discussed.

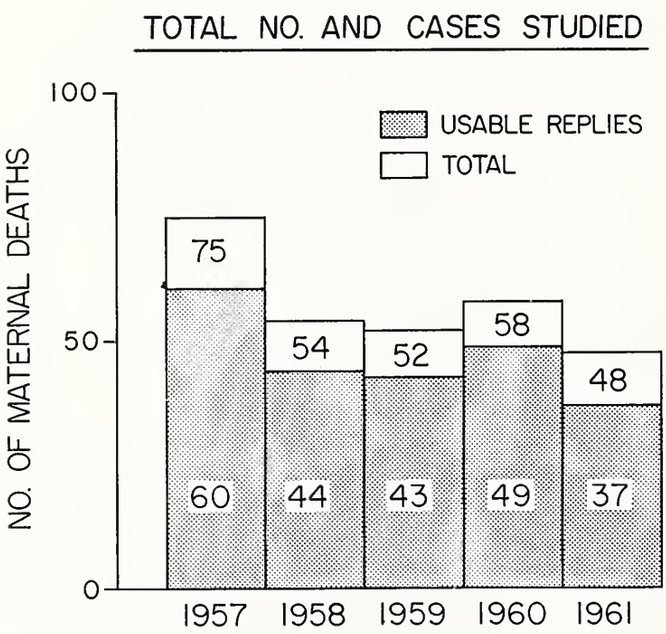

Table 1

RESULTS

Maternal Deaths. In Table 1 the 287 deaths occurring during the five years' study are divided according to the years in which they took place. There is a decrease from 75 in 1957 to 48 in 1961. Letters and data sheets were sent out on all these cases and the total number of usable replies was 233 or 81 per cent. This proportion did not change appreciably during the five years. In Table 2 the maternal death rate per 10,000 live births is shown for each of the years studied.

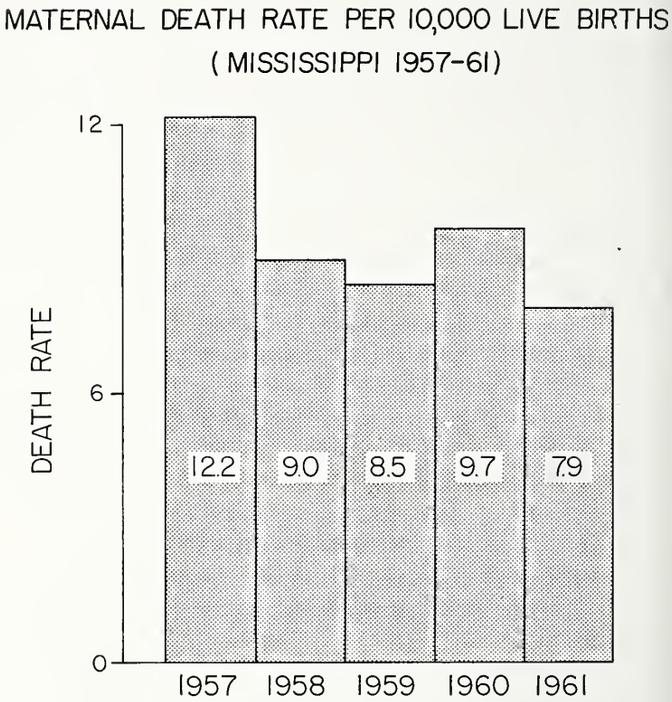

Table 2

All replies were evaluated according to their adequacy. This ranged from 1 (low) to 5 (high). In order to achieve the latter rating the data sheet had to be completely filled out, a relevant explanatory note attached, and an autopsy report available. The mean adequacy for all the cases studied was 2.42, ranging from a low of 2.28 in 1959 to a high of 2.63 in 1960. Cases rated 1 or 2 were often difficult to evaluate because of the scanty nature of the information. The percentage of replies in category 3 or above (those of greatest value) was 35, 36, 40, 47 and 53 per cent respectively for the five years. A distressing feature of the replies was the infrequent performance of an autopsy even when there was real question as to the cause of death or when the patient was not seen by the physician until shortly before or after death. In fact, in only 20 patients (8.6 per cent) of the 233 usable replies were the results of an autopsy available.

Causes of Death. Direct obstetric deaths are defined by the Guide as those in which the cause of death is due to a condition directly related to pregnancy such as hemorrhage, toxemia or infection. Indirect obstetric deaths are those resulting from disease present before or developing during pregnancy (not a direct effect of the pregnancy) which was obviously aggravated by the physiological effects of the pregnancy and caused the death. Unrelated deaths are those in which some entirely extraneous cause, such as accident, was responsible for the death. It should be noted that no such cases are included in the committee's data. This is in part due to the fact that the standard certificate of death in the state of Mississippi does not require a statement of pregnancy if this condition was not directly involved in the patient's death.

Table 3 shows a slight but steady decline in the

MATERNAL MORTALITY IN MISSISSIPPI
1957-61
DIRECT OBSTETRIC DEATHS

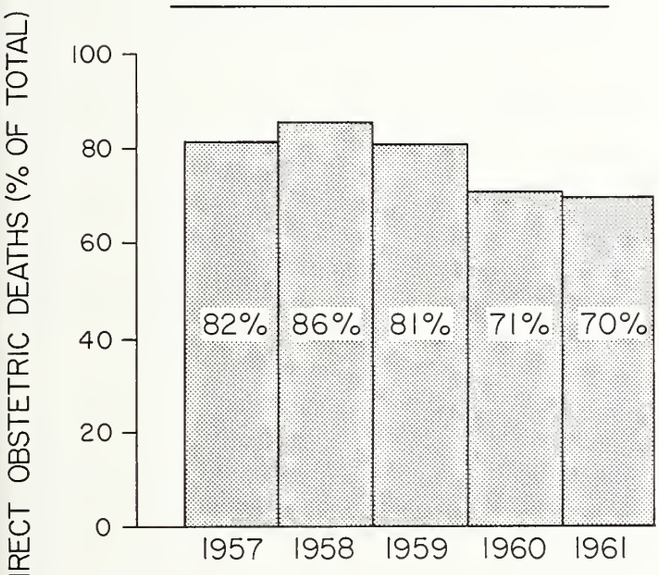

Table 3

number of direct obstetric deaths. Of great interest is the number of deaths from specific causes, since this may indicate definite areas of concern. The changes in these are shown in Table 4. The total number of deaths from hemorrhage has shown a sharp decline from 29 in 1957 to 10 in 1961. However, little change is noted in the number of deaths from toxemia and infection.

AVOIDABLE FACTORS

In each case the committee attempts to analyze whether under ideal circumstances of physician knowledge, hospital facilities, and patient cooperation the death could have been avoided and, if so, to identify the specific avoidable factors. A slight

MATERNAL MORTALITY IN MISSISSIPPI
1957-61
CAUSES OF DIRECT OBSTETRIC DEATHS

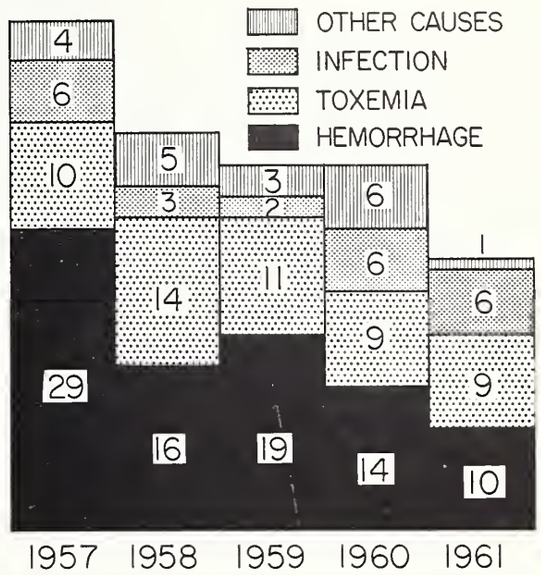

Table 4

decrease in the proportion of avoidable deaths is shown over the five years (Table 5).

Avoidable factors are arbitrarily assigned to physician, hospital, or patient. Often more than one avoidable factor is found. In general, physician factors varied according to the type of complication present. Hospital factors, which were in the minority, were generally related to failure to provide adequate amounts of blood and facilities for handling complicated obstetric problems. Although patient factors included failure to return

MATERNAL MORTALITY IN MISSISSIPPI
1957-61
AVOIDABLE DEATHS

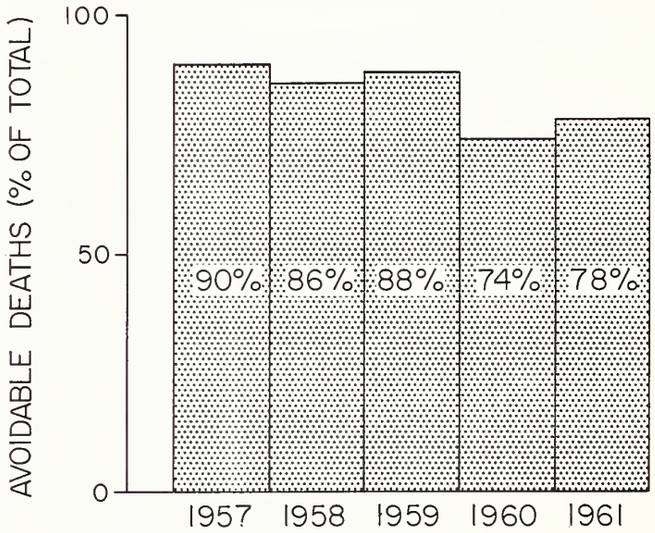

Table 5

when asked by the physician and failure to carry out the physician's instructions, by far the commonest was failure to attend for antepartal care.

COMMENT

The data obtained during the five year period has enabled the committee to draw a broad picture of the pattern of maternal deaths in Mississippi. It would perhaps have been of interest to obtain more precise information in many instances so as to assess trends more accurately and define areas of concern more carefully. However, the questionnaire method itself has some deficiencies which would to some degree have made the collection of detailed information difficult. That the committee was able to assemble as much information as it did was due to the untiring efforts of the central office and the willing cooperation of the physicians in the state.

Several encouraging observations can be made. First, a definite and gratifying decrease has occurred in the number of maternal deaths per year. However, it should be noted that the rate for 1961 —7.9 per 10,000 live births—is two and one-half times the national rate of 3.2 deaths per 10,000 live births for the same year. In large part this was due to the nonwhite rate of 12.1 deaths per 10,000 live births: the white rate was only 3.0. Second, over the five year period (1957 to 1961) a slight but definite decrease in the number of direct obstetric deaths (most likely to be due to specific avoidable factors) and in the proportion of avoidable deaths is indicative of a general improvement in maternal care throughout the state. Third, the reduction in the number of deaths due to hemorrhage from 29 in 1957 to 10 in 1961 is evidence of increasing concern among physicians and hospital administrators for improving methods of obtaining blood and giving it in sufficient quantities in emergencies.

On the other hand, it is apparent that there are several matters for concern. First, the number of deaths from toxemia has not decreased appreciably. Data sheets on these patients often reveal one of two difficulties. Either the treatment of the patient with severe preeclampsia or eclampsia was insufficiently vigorous, especially in the reluctance to induce labor, or convulsions or death occurred while the patient was under observation, indicating a lack of awareness on the part of hospital personnel that these patients are critically ill and require constant attention. Second, the patient factor "did not attend for antepartal care" was frequently implicated by the committee as playing a part in the patient's death. A tremendous need exists in Mississippi to provide facilities and encourage adequate attendance for antepartal care. Third, deaths not infrequently followed delivery at home by a midwife with resulting complications. Even when trained nurse-midwives are permitted to supervise labor and delivery it is considered essential that primigravidas, women who are para 4 or more, and those with any sort of complication be delivered in hospital under the care of a physician. In this state, patients such as these are still being delivered by virtually untrained midwives in totally inadequate home surroundings.

The interest and information produced as a result of the committee's first five years of study are, I believe, sufficient to indicate the necessity of continuing this investigation. Further, the committee has a responsibility to improve its methods of data collection and to insure the dissemination of carefully analyzed results. In the future, it may also be appropriate for the committee to consider other techniques of furthering good obstetric practice based on information obtained from their studies.

SUMMARY

1. A summary is presented of data obtained by the Committee on Maternal and Child Care in the first five years of their study of maternal deaths in Mississippi (from 1957 to 1961).

2. A gratifying decrease in the total number of maternal deaths and in the deaths from hemorrhage is noted as well as a reduction in the proportion of direct obstetric deaths and avoidable deaths.

3. The management of toxemia and infection, and the provision of adequate antepartal care and delivery facilities are still pressing problems in Mississippi.

4. Continuation of the committee's study would seem to be indicated, with hope of improvement in methods of collecting data, in expansion of techniques of spreading information about the findings and in enunciation of sound practices of obstetric care. ★★★

2500 North State St.

FRENCH ACCENT

The magistrate of a village just outside Paris recently erected this sign at the town limits: "Drivers Beware: We do not have a hospital."

Institutions for the Aged or Infirm In Mississippi

ALTON B. COBB, M.D.
Jackson, Mississippi

The Chronic Illness Services of the Mississippi State Board of Health is responsible for enforcement of adequate standards for institutions for the aged or infirm in the state. The author, who is director of Chronic Illness Services, discusses characteristics of state nursing homes.

By legal definition, the Chronic Illness Services of the Mississippi State Board of Health is responsible for establishment and enforcement of adequate standards for institutions for the aged or infirm. As further defined in the Laws of 1952, Chapter 384, Section 6964-17, this means a place which provides group living arrangements for four or more persons who are unrelated to the operator and who are being provided food, shelter, and personal care. The definition further specifies that this is intended to cover nursing homes, convalescent homes, and homes for the aged. The licensure standards and regulations which have been used since 1952 have been generally applicable to all homes in the state with no distinctions or exceptions in respect to type of home, level of services, or other characteristics.

SIZE OF HOMES

Now for a few minutes let us look at some identifiable characteristics of homes in Mississippi. This information comes from the tabulation of annual reports for 1962 which each home submits annually as one of the basic requirements for renewal of license.

On April 1, 1963, 94 homes had been licensed. These homes had a total bed capacity of about 3,000 beds, or an average bed capacity of 32. This "average," as is so often true, is misleading as a summary statistic on size of state homes. As shown in Table 1, 59 homes had fewer than 25 beds, 25 had 25 to 49 beds, and only 13 had 50 or more beds. Furthermore, it is important to observe that 31, or almost one-third of the homes, had fewer than 15 beds.

It is apparent that the homes are quite dissimilar in respect to bed capacity, but a large proportion are relatively small homes. I shall not discuss in detail all the many important implications of this basic data on size, but it should be pointed out that there are many implications including such questions as can the smaller homes provide the technical services, including skilled nursing needed by many of their patients. From the standpoint of nursing home administration, it is doubtful if the very small home can provide the nursing

TABLE 1

NUMBER OF BEDS REPORTED IN NURSING AND CONVALESCENT HOMES DEC. 31, 1962

Number of Beds	*Number of Homes*
Total	97
5-9	20
10-14	11
15-19	17
20-24	11
25-29	6
30-34	9
35-39	5
40-44	5
45-49	0
50-74	5
75-99	6
100 and over	2

Read before the Mississippi Nursing Home Association, Jackson, Nov. 14, 1963.

components of facility and range of services as a nursing home and return a fair income to the operator.

Another important characteristic of homes is distribution of beds by type of accommodation. Of the total 2,699 licensed beds, 617 or 22.9 per cent were in private rooms; 962 or 35.6 per cent were semi-private, and 1,107 or 41.0 per cent represented ward beds. Thirteen were not classified.

TABLE 2

DISTRIBUTION OF BEDS BY TYPE OF ACCOMMODATION DEC. 31, 1962

Accommodation	*Number*	*Per Cent*
Total beds	2,699	100.0
Private beds	617	22.9
Semi-private beds	962	35.6
Ward beds	1,107	41.0
Other	13	0.5

With the well-recognized trend toward private and semi-private mode of accommodation for patients in both short-term and long-term care institutions, one may well question the future for the nursing home ward. More families seem to be requesting private or semi-private rooms. Here again, however, the variation between homes is significant. A few homes offer exclusively private or semi-private accommodations while in others of similar size and staffing, the beds are mainly in wards. Dissimilarity seems to be the pattern. Of course, accommodation on wards tends to increase the potential risk for cross infection among patients.

There were 932 employees in the 97 licensed homes on Dec. 31, 1962. As shown in Table No. 3, the greater proportion of these employees were represented by aides than any other category.

There were 27 registered nurses employed in the 97 homes; 77 licensed practical nurses were on the staffs of the homes. These two groups of licensed nurses totaled 104 persons or an average of 1.1 per cent licensed nurses per home. However, these licensed persons were employed by approximately 50 of the licensed homes. There are about 50 homes presently licensed with no licensed nursing personnel on the staff. I believe it only fair to question the propriety of homes without licensed nursing personnel being presented to the public as nursing homes. Many of these homes can and do provide a fine quality custodial or personal care service.

TABLE 4

AGE DISTRIBUTION OF PATIENTS SERVED DURING 1962 (EXCLUDING TWO HOMES FOR ALCOHOLICS ONLY)

Age	*Number*	*Per Cent*
Total	3,676	100.0
Under 18	6	0.2
18-44	43	1.2
45-64	333	9.0
65-74	827	22.5
75-84	1,573	42.8
85 and over	894	24.3

The nursing homes are serving primarily an aged population. As shown in Table 4, only about

TABLE 3

DISTRIBUTION OF FULL-TIME EMPLOYEES BY TYPE OF EMPLOYEE, WITH AVERAGE NUMBER PER HOME AND PATIENTS PER EMPLOYEE DEC. 31, 1962

Type of Employee	*Number*	*Per Cent*	*Average Per Home*		*Patients Per Employee*	
Total	932	100.0	9.6		2.2	
Administrative	94	10.1	1.0		22.4	
R. N.'s	27	2.9	0.3	1.1	78.0	20.2
L. P. N.'s	77	8.3	0.8		27.4	
Aides	381	40.9	3.9		5.5	
Maids and orderlies	131	14.0	1.4		16.1	
Food service supervisor	45	4.8	0.5	1.5	46.8	14.6
Other food service	99	10.6	1.0		21.3	
Laundry workers	47	5.0	0.5		44.8	
Other	31	3.3	0.3		68.0	

10 per cent of the patients are under 65 years of age, while almost 25 per cent are over 85. Also, it is well known that these older persons have a much greater prevalence of chronic diseases than younger persons.

A total of 721,788 days of patient care were reported by the homes. The average length of stay was 450 days or approximately 15 months. This emphasizes the need for safe, attractive environment for these extended periods of stay.

During 1962, the place from which patients were admitted to a nursing home is shown in Table 5.

TABLE 5

PLACE FROM WHICH PATIENTS WERE ADMITTED DURING 1962 (EXCLUDING TWO HOMES FOR ALCOHOLICS ONLY)

Place	*Number*	*Per Cent*
Total	1,760	100.0
Hospital	473	26.9
Another nursing home	120	6.8
Own or relatives' home	1,123	63.8
Other	44	2.5

It is interesting to note that over one-fourth of all nursing home admissions during this period originated from hospitals. The common prevalence of drug resistant strains of staphylococcal and other organisms in hospitals increase the potential risk for introducing these organisms into the nursing home. This raises again the urgent question in regard to staff, supervision, isolation facilities, and total routine of patient care employed by the homes.

Another item on the annual report completed by all homes is one on reason for patient admission shown in Table 6.

TABLE 6

REASON PATIENTS WERE ADMITTED DURING 1962 (EXCLUDING TWO HOMES FOR ALCOHOLICS ONLY)

Reason	*Number*	*Per Cent*
Total	1,760	100.0
Custodial care	202	11.5
Retirement	64	3.6
Rehabilitation	183	10.4
Nursing care	1,292	73.4
Other	19	1.1

Certainly one would assume that for an individual patient several reasons for admission may exist and the reason assigned is undoubtedly the principal reason. As the reason of rehabilitation includes nursing and other professional services, one must conclude that almost 85 per cent of the patients admitted were admitted for "nursing care." Since a large number of homes presently licensed do not have licensed nursing personnel, this raises the question again of the propriety in homes advertising to the public as homes offering nursing care in instances where there are no licensed nursing personnel on the staff. Another point is that almost 15 per cent of patients were admitted for custodial care or retirement. In many instances these were probably admitted to the homes offering, in the main, this level of care and service.

Many persons seem to feel that even today the nursing home admission represents the last stop, so to speak, for every patient. The results of the nursing homes reports seem to contradict this assumption. Table 7 represents a tabulation of reasons for discharge from Mississippi nursing homes during 1962:

TABLE 7

REASONS PATIENTS WERE DISCHARGED DURING 1962 (EXCLUDING TWO HOMES FOR ALCOHOLICS ONLY)

Reasons	*Number*	*Per Cent*
Total	1,602	100.0
Returned to own or relatives' home	655	40.9
Transferred to a hospital	271	16.9
Transferred to another nursing home	84	5.2
Died	578	36.1
Other	14	0.9

Possibility for improved rehabilitation services was well developed during our panel discussion on rehabilitation. This is particularly true for that level of rehabilitation directed at improving the patient's level of function in the activities of daily living. This discharge rate of patients back to their own or relatives' home indicates that a real effort is being made to return patients to self care.

SPECIFIC CHARACTERISTICS

In summary, specific characteristics of Mississippi nursing homes are the following:

1. The homes are relatively small in size.
2. The homes are serving an aged population of residents.

3. Over 40 per cent of the beds in nursing homes in this state are in ward type of accommodation.

4. About 50 per cent of the homes have one or more licensed nursing personnel on the staff.

5. Residents remain in homes for an average stay of 450 days or 15 months.

6. Over 85 per cent of admissions were for some level of nursing care.

7. Over 40 per cent of persons discharged from homes returned to their own home or a relative's home.

JOINT OBJECTIVE

Now what does all this mean for us today and in the future. Our joint objective should be continued improvement, where needed, in care and services available to nursing home residents. Our role in the official regulatory agency is to establish and enforce minimal standards applicable to all institutions or facilities offering care and services under the definition and limitation of the licensure law. We have voluntarily developed an educational and, hopefully, a consultation service to all homes. We are obligated to the public to take whatever legal or administrative action may be necessary to force closure of those homes not meeting current minimal standards for licensure.

The principal characteristic which the homes have in common is their dissimilarity. Of course, no two or more homes will ever be identical but the present lack of classification into at least three or four major groups of homes with similar patterns of services to offer is a real deficiency which should be solved.

At present all homes which are licensed are listed on one roster. Families, physicians, and others who are preparing to place persons in homes have no information available except that gained from personal visitation or hearsay in respect to the quantity or quality of services available in the individual homes. Many of the homes have added trained, licensed staff; they have made major and costly renovations of their facilities; their personnel has attended short courses and institutes; and, their owners read and study every day for improvement of patient care services. However, the public has no readily available guide or directory of homes reflecting the many important differences in order that they make the best possible placement of an individual patient in a home.

There is a definite need for several major types of homes offering specialized services to patients with many different problems and needs themselves. For instance, there is a need for small homes offering mainly lodging, meals, and some personal care. These homes can probably maintain a more typical "home-like" atmosphere. There is a need for homes offering mainly custodial care and personal care but with limited nursing care. Next, there is a need for homes offering skilled intensive nursing care. Also, there may be a need for homes specializing in intensive rehabilitation services with skilled nursing care. This is not to imply that every home does not need to give attention to some aspect of rehabilitation, but certainly every home should not attempt to offer to the public intensive rehabilitation services.

NEED FOR CLASSIFICATION

Every home should be concerned with patient rehabilitation, but mainly at the level of activities of daily living. It is not my purpose here today to outline or propose a specific plan for classification of homes, but to provide some information to you which suggests the need for classification and some general ideas which may be useful in considering a classification plan.

Another important aspect to the need for classification of homes is that the "third party people," be they insurance companies, federal or state agencies or others paying for services, need and generally require a classification system as the level of payments is related to the services available.

There are many good and sufficient reasons why a system of classification of homes for the aged or infirm is needed. However, such a classification system should result from joint study and proposals by representatives from interested groups and organizations, such as the Mississippi Nursing Home Association, the Mississippi State Medical Association, and nursing organizations and the licensing agency. Only through such joint endeavor can a classification system be formulated which will meet the several defined objectives of classification and serve as a functional, practical base for improving care and services of our aged population. ★★★

2423 North State St.

A Survey of Hemoglobinopathies in Mississippi

ROBERT B. THOMPSON, M.D.; S. LEGAN, and J. ODOM
Jackson, Mississippi

WHEREAS MOST STUDIES in the past have dealt with one aspect of hemoglobin such as the genetic, anthropologic, structural or hematologic features, we are attempting to correlate the clinical and hematologic picture with the physiologic function, especially the oxygen carrying capacity. Before such a study can gain much ground, it is necessary initially to unearth the hemoglobin abnormality as to type and geographical distribution. The material presented is a preliminary report on a six months' screening survey from May 1963 to November 1963 as to the incidence of hemoglobinopathies in Mississippi, their type and geographic distribution.

From the Department of Clinical Laboratory Sciences, University of Mississippi School of Medicine.

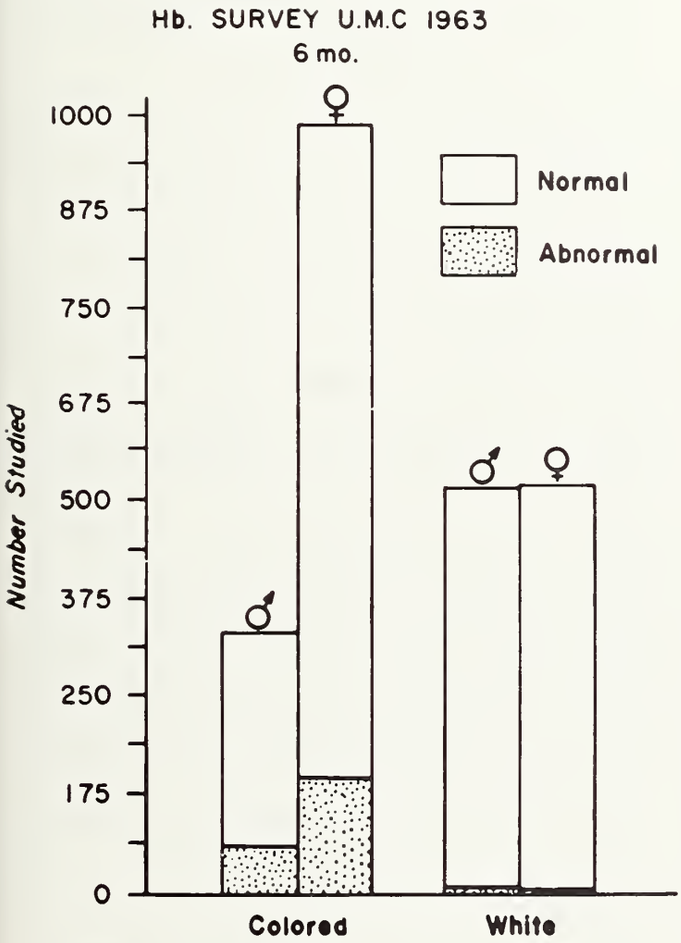

Figure 1. Graphic representation of a six month hemoglobin survey of population of Mississippi illustrating the number of normal and abnormal cases studied in both races and sexes.

In a study over the six months from May 1963 to November 1963 all admissions or visitations to the University of Mississippi Medical Center were screened for hemoglobin abnormalities, their type and geographic distribution. To the time of this report, 3,560 cases had been studied with approximately an equal number from both white and colored races. The authors review normal hemoglobin components as are found in red cells and cord blood and discuss their data on hemoglobinopathies in Mississippi.

In order to adequately sample the population, all admissions or visitations to the University of Mississippi Medical Center were screened for hemoglobin abnormalities. Where inherent abnormalities were found, visitations were made to the area in an attempt to complete the screening of the family. To date, 3,560 cases have been studied with approximately an equal number from both white and colored races (Figure 1). However, the number of colored females is approximately four times the number of colored males, this being all the more surprising in that it excludes patients from the obstetrical service. Of the cases studied, 23 per cent of colored males and 19 per cent of colored females possessed hemoglobin abnormali-

ties whereas only 1.5 per cent of white males and 0.75 per cent of white females exhibited abnormalities. The age distribution curve of the normal population as shown in Figure 2 is skewed to the right as it is rather difficult to obtain children for this study.

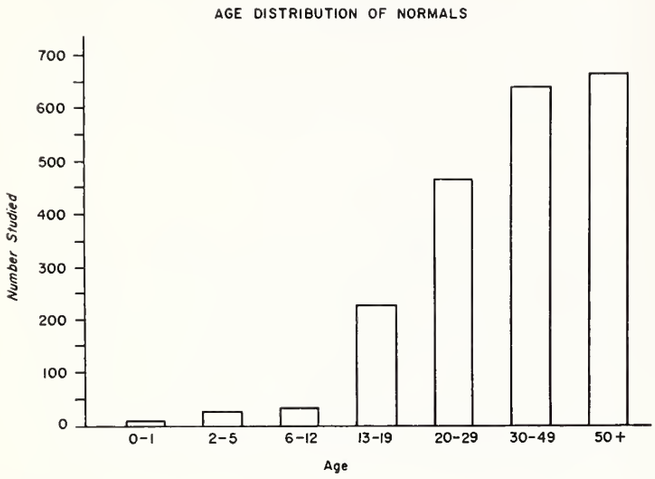

Figure 2. Age distribution of the normal population under study, excluding newborns.

Before proceeding with the discussion of hemoglobin abnormalities, it might be wise to briefly review normal hemoglobin components as are found in red cells and cord blood. The normal human adult possesses four hemoglobin components as shown in Table I, the major fraction being Hb-A_0 with its degradation product Hb-A_1

TABLE I

NORMAL HUMAN ADULT HEMOGLOBIN COMPONENTS

Hb A_0	85-95 %
Hb A_1	1-15 %
Hb F	0- 0.5%
Hb A_2	2.1- 2.7%
Hb B_2	2.1- 2.7%

comprising approximately 95 per cent of the total hemoglobin. In addition there is a small amount of fetal hemoglobin 0.5-1 per cent distributed in specific cells and a small amount of a minor but important hemoglobin component, Hb-A_2 comprising from 2.1-2.7 per cent. Hb-A_2 has a benign allelomorph Hb-A_2' or Hb-B_2[9]. This may exist either along with or without Hb-A_2 but the sum total of both components is less than 2.7 per cent. Thus, an individual may exhibit both Hb-A_2 and Hb-B_2 or may be homozygous for Hb-B_2. The presence of Hb-B_2 below 3 per cent is of only academic or genetic significance. The principal function of hemoglobin is the transportation of oxygen. Both Hb-A_0 and Hb-A_1 show a normal sigmoid oxygen dissociation curve[7] indicating that at low partial pressures hemoglobin does not readily take up oxygen. Once the initial oxygen molecule has entered the hemoglobin complex, the remaining three molecules combine more readily. Hb-F also shows a normal sigmoid oxygen dissociation curve. In pure isolated form there is no difference between Hb-F and Hb-A. It is of interest that Hb-A_2 and Hb-B_2[7] show an increased oxygen dissociation curve approximately two and one-half times normal.

Having dispensed with normal adult hemoglobin components, we should mention briefly the hemoglobin components which can be found in cord blood. These are as shown in Table II, Hb-

TABLE II

NORMAL HEMOGLOBIN COMPONENTS OF CORD BLOOD

Hb A_0	20-30 %
Hb A_1	
Hb F_0	60-95 %
Hb F_1	
Hb A_2	0.1%
Hb H	0- 5 %
Hb Barts	0- 3 %

A_0, Hb-F_0, its degradation product F_1, Hb-A_2 Hb-Barts and Hb-H[6]. The latter becomes significant when present in amounts of 10 per cent or more as in these cases they present a picture consistent with erythroblastosis fetalis. The oxygen dissociation curve of Hb-H and Hb-Barts is increased greatly over Hb-A and Hb-F some eight to ten fold, and at low partial pressure oxygen cannot be given off to the tissues. Thus, these hemoglobins are incompatible with life. The distribution of the hemoglobinopathies as found in cord blood are shown in Figure 3. Perhaps the presence of seven cases of hemoglobin F + A + C in female cords is significant but the data is yet too sketchy.

Figure 4 shows the distribution of the various hemoglobinopathies in which both white and colored candidates may be expected to participate. It is of interest to note that in cases with elevated

Hb-A_2 or decreased Hb-A_2 there is almost an equal correlation between both races. Such cases may be regarded as variants of thalassemic trait. Many of these cases present as refractory anemias with hemoglobins ranging from 9-11 gm. per cent. (In Mississippi 1.5 per cent of white males

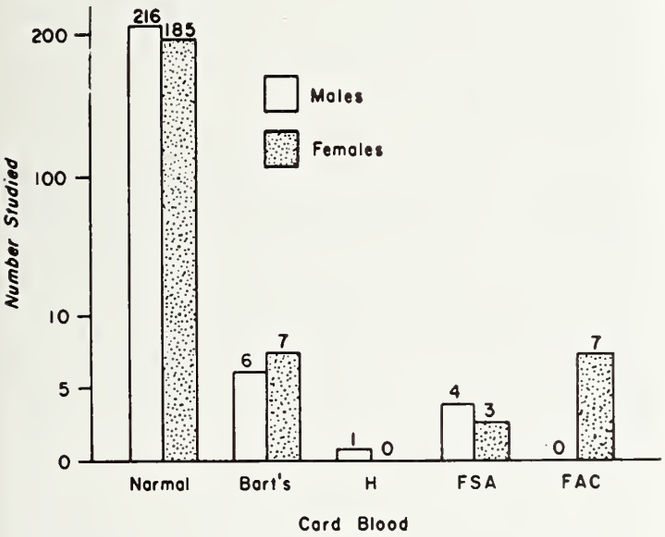

Figure 3. Distribution of hemoglobin abnormalities in cord blood or newborn infants.

and 0.75 per cent of white females demonstrate this genetic abnormality.) To clarify the term thalassemia and its full significance, it might be wise to digress for a moment.

The term thalassemia is derived from the Greek "the sea" meaning the Mediterranean. The term thalassemia is used in the singular as a general clinical one to comprise both homozygous and heterozygous forms and their different varieties. It should be emphasized that there exists a series of similar inherited conditions, due to different mutant genes which may be called the "thalassemias."

Thalassemia is a common disorder in many parts of the world. There are so many carriers of the genes in some effected races that it must be assumed that the condition has existed among them for many generations. Direct evidence of the pre-existence of thalassemia in historic and prehistoric times is scanty. It is estimated that between 10 to 20 per cent of the American Negro possesses the heterozygous condition or thalassemia trait (in Mississippi approximately 11 per cent).

In 1889 Von Jaksch[11] described under the title pseudoleukemia of infants, a condition paralleling the homozygous form of thalassemia, so-called thalassemia major. The patient described, aged 14 months, presented with anemia, leukocytosis, splenomegaly, and fever. The first classic description of thalassemia major was presented by Dr. Thomas B. Cooley in 1924.[3, 4] His paper entitled "A Series of Cases of Splenomegaly in Children with Anemia and Peculiar Bone Changes" closely parallels the clinical syndrome known as pseudoleukemia of infants and has given rise to a syndrome known as Cooley's anemia. In 1925 the first cases of thalassemia minor were described by Rietti[1] and the osmotic fragility of erythrocytes was used as a diagnostic tool in distinguishing this entity from congenital hemolytic icterus. The first American descriptions of thalassemia minor[12] in families of Mediterranean origin appeared from 1940 onwards and were attributed to the work of Wintrobe and his colleagues. The term target cell anemia was given to the disease by Dameshek.[5]

In 1955 the first cases of an interaction of thalassemia with abnormal hemoglobin states was presented by Silverstroni and Bianco.[10] Here the interaction of thalassemia with Hb-S was described under the term "microdrepanocytic disease."

The thalassemias behave as a single gene effect whether occurring in single (heterozygous) or double (homozygous) dose. The basic lesion lies in the erythroblasts which though greatly increased in quantity, produce insufficient numbers of small, flat, short-lived cells containing inadequate amounts of hemoglobin. Ingram and Stretton[8] have speculated that thalassemia is a mutation producing a hemoglobin with a hidden amino acid substitution such that the hemoglobin produced is electrophoretically normal. The hidden abnormal

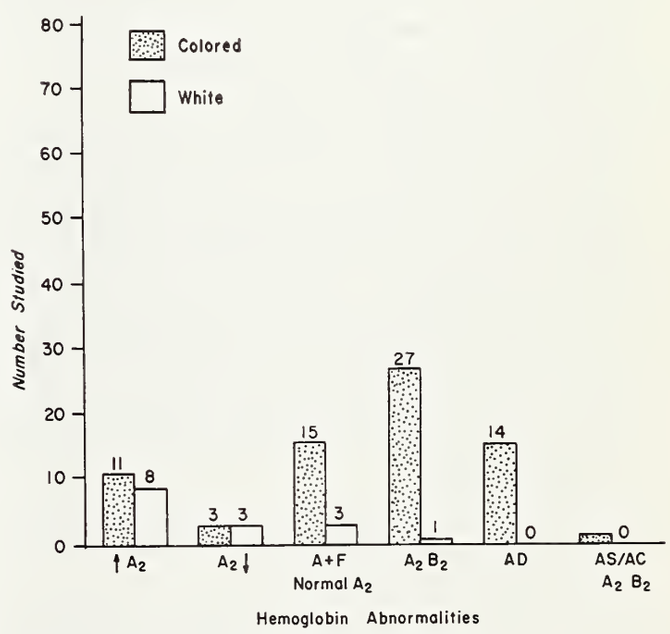

Figure 4. Distribution of hemoglobin abnormalities common to both white and colored races.

hemoglobin determines a characteristically low rate of synthesis.

A number of types of thalassemia have been recognized in the country occurring among the white and colored population. Table III illustrates the composite picture of the heterogeneity of thalassemia.

TABLE III

TYPES OF THALASSEMIC TRAITS

Thalassemia with elevated Hb-A_2 (no Hb-F)
Thalassemia with elevated Hb-A_2 (Hb-F—5-9%)
Thalassemia with decreased Hb-A_2 (no Hb-F)
Thalassemia with absent Hb-A_2
Thalassemia with normal Hb-A_2 (slight elevation of Hb-F)
Thalassemia with normal Hb-A_2 (no Hb-F)
Thalassemia with elevated Hb-A_2 + B_2 (4%)
Thalassemia with elevated Hb-B_2 (4%) (no Hb-A_2)
Thalassemia with Hb-Lepore
Thalassemia with Hb-H and Hb-Barts
Thalassemia with interaction (C, D, E, G, S, J, K)

It was initially felt that quantitation of Hb-A_2 and Hb-F would be of value in the diagnosis of the majority of thalassemias. However, recent evidence points to the fact that Hb-A_2 may be normal or absent and Hb-F within normal limits and thalassemia may still persist.

The diagnosis of thalassemia is made by use of the following facilities:

1. Starch gel electrophoresis. This allows rapid separation of the major and minor hemoglobin components with semi-quantitation;[6]
2. Osmotic fragility studies. By using serial dilutions of sodium chloride, evidence of increased resistance of cells is obtained. This method is used almost routinely by Silverstroni and Bianco[10] in their attempts to screen the Italian population;
3. Examination of the peripheral smear. One is usually impressed by a large number of target cells usually over 30 per cent as well as considerable microcytosis, hypochromia, anisocytosis, poikilocytosis and a basophilic strippling of erythrocytes;
4. Serum iron. Usually serum iron levels are normal or slightly elevated with evidence of refractoriness to iron therapy;
5. Bone marrow examination. Here one sees a marked erythroid hyperplasia and the presence of target cells usually in excess of 20 per cent;
6. F cell procedure of Betke.[2] By this method the distribution of fetal hemoglobin in the erythrocytes is studied and an excess of 3 per cent is highly indicative of thalassemia either in interaction or alone;
7. Chromium^{51} uptake. Usually red cells showed a slightly shortened red cell survival;
8. Clinical examination. In many cases the presence of hepatomegaly or splenomegaly is a clue to the diagnosis;
9. Family study.

Often the diagnosis of thalassemia remains obscure until the entire family picture is examined and the presence of an erythrocytic abnormality is demonstrated. It is not uncommon to discover thalassemia in siblings with no apparent hematological abnormality in the parents. Hb-H, for example, is well known to present in this form. Only after careful scrutiny can one unearth a mild hematologic defect.

The brief outline of the "thalassemias" tends to point out the complexity of the entity plus the fact that the term is simply a waste basket for many poorly understood disease states. It is not uncommon to discover thalassemia in "non Mediterranean off-spring" pointing further to the overuse of the term "the sea."

If the term thalassemia is used loosely to encompass a large variety of disease states, Table III, we found that the overall incidence is 3.2 per cent; males predominating over females by a ratio of 3:1. Many of the cases of sickle cell anemia have yet to be studied, and it is felt that

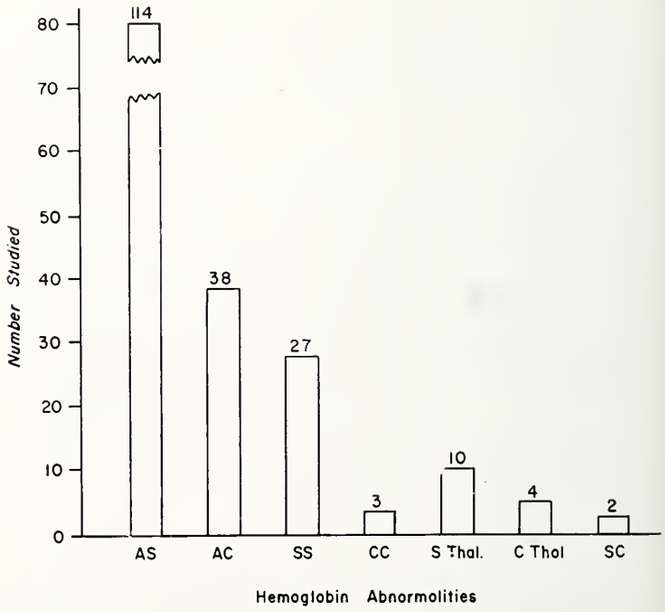

Figure 5. Distribution of hemoglobin abnormalities restricted entirely to colored population.

some of these may fall into the Hb-S thalassemia group.

Figure 5 illustrates the distribution of other hemoglobinopathies restricted entirely to the colored race. Hb-S shows an overall incidence of 11.5 per cent, males 15 per cent and females 11 per cent. In the homozygous form (Hb-SS) the overall incidence is 2 per cent, males predominating over females by 2:1 ratio. Three and one-half per cent of the Negroes in Mississippi exhibit the gene for Hb-C either alone or in combination with other hemoglobins (3 per cent of males and 3.6 per cent of females).

The overall geographical distribution of hemoglobinopathies in Mississippi cannot be well demonstrated, as this is based entirely upon admission to the University of Mississippi Medical Center. The large population drawn from Jackson and surrounding counties becomes apparent, while the extreme northern and southern portion of the state escape our detection screen due to proximity to other Medical Centers. It is hoped during the next few years that it will be possible to thoroughly investigate a large number of hemoglobinopathies in both white and colored races in order to help understand the wide clinical and hematologic picture which accompanies them. ★★★

2500 North State St.

Supported by UMC Grant No. 5006, S01-FR-05086-01 and N.I.H. *Grant AM-07943-01.*

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TOBACCO AND HELP

The patient sat silently for a few moments in the psychiatrist's office and then began stuffing pipe tobacco into his nostrils.

Somewhat aghast, the doctor observed him closely and said: "My good man, you need help and have certainly come to the right place. What may I do for you?"

Looking up, the patient responded: "You can give me a light."

Toxemia of Pregnancy

ARTHUR W. LINDSEY, JR., M.D.
Cleveland, Mississippi

On the average, toxemia occurs in 6 or 7 per cent of all pregnant women. The author discusses classification, pathological physiology, and treatment.

THE AMERICAN COMMITTEE on Maternal Welfare in 1952 defined and classified the acute toxemias of pregnancy as follows:

I. Acute toxemias of pregnancy
   A. Preeclampsia
      1. Mild
      2. Severe
   B. Eclampsia
II. Chronic hypertensive disease during pregnancy (with or without toxemia)
III. Unclassified (insufficient data available)

Acute toxemia is defined as the occurrence of one or a combination of the following symptoms after the 24th week of pregnancy: (1) hypertension, or (2) albuminuria, or (3) edema. If hypertension alone is used as the diagnostic criterion, there must be a systolic pressure of 140 and/or a diastolic pressure of 90, or an increase in systolic pressure of 30, or an increase in diastolic pressure of 15 mm. Hg. The blood pressure must be elevated to these levels on at least two successive occasions six hours apart. Edema of the hands or face must occur in the morning or there must be at least a weight gain of five pounds or more in one week. Albuminuria must be one plus (0.5 gm/24 hours) on two or more successive days.

Severe preeclampsia is characterized by: (1) systolic pressure of 160 and/or a diastolic pressure of 110, (2) three plus albuminuria, (3) oliguria (less than 400 cc/24 hours), (4) cerebral or visual disturbances, (5) edema of the lungs or cyanosis. Eclampsia is present if the pregnant woman has convulsions in the presence of hypertension or edema or albuminuria.

The occurrence of toxemia of pregnancy varies considerably depending largely on the diet and prenatal care of the pregnant woman. The average occurrence is 6 or 7 per cent of all gravidae.[2] In this sector the highest incidence is found in the young negro primigravida (35 per cent).[3] Many of these women have inadequately controlled diets and little or no prenatal care. Eclampsia was found to be present in 0.56 per cent of 12,606 deliveries over a seven and one half year period on the obstetrical service at the University Hospital in Jackson.[4] Toxemia continues to be the leading cause of maternal mortality in the United States.[1]

PATHOLOGICAL PHYSIOLOGY

The exact etiology of toxemia is not known. The pathology of toxemia has been studied in humans and experimental animals. One study, based on renal biopsies in humans,[5] found the main lesion to be widespread edema of the glomeruli. The edema involves mainly the glomerular tuft and also includes the smaller arteries and arterioles. In the typical case these changes were completely reversible with return to normal. In severe cases of toxemia there were some permanent vascular changes in the glomeruli. These changes were different from those of nephritis. Toxemia has not been shown to cause nephritis. There continues to be some question about toxemia causing chronic hypertensive disease. Some data suggest that in severe cases with permanent kidney damage that chronic hypertension does result from toxemia of pregnancy.

Thrombocytopenia occurs in toxemia but rarely causes problems in blood coagulation. Thrombocytopenia has also been noted in experimental toxemia produced in rats.[6] Agglutination of platelets were noted in the maternal vascular spaces of the placenta in experimental animals. This

Read before the 81st Semi-annual Meeting, Delta Medical Society, Greenville, April 8, 1964.

could account for the increased incidence of abruptio placenta in toxemia.

Uric acid is found elevated in toxemia whereas this is normal in pregnant women with chronic hypertension disease.[5] This fact is of importance in separating these two conditions. The uric acid pool is increased due to the kidneys inability to excrete uric acid properly. Spasm of the retinal arterioles is a common finding which is usually localized.

In eclampsia, hemorrhagic necrosis of the periphery of the hepatic lobule occurs. The kidney lesions demonstrate marked narrowing of the glomerular capillaries which are usually avascular. Edema is the main lesion found in the brain. The heart may be found normal or may demonstrate cloudy swelling or myocardial necrosis. The lungs usually develop edema, and bronchopneumonia may occur as the result of aspiration or infection. The adrenal glands become edematous and hemorrhage occurs in varying degrees. The common lesion located in all of the organs is in the precapillary arteriole. At this site edema, narrowing, hemorrhage, and necrosis occurs.[2]

TREATMENT

Since the exact etiology of toxemia is not known, the treatment consists of treating the signs and symptoms. The best treatment, as in any disease, is prevention. Proper diet with careful prenatal care can prevent toxemia. In mild preeclampsia the restriction of salt in the diet and administration of diuretics is sufficient along with control of weight gain. Severe preeclampsia usually necessitates hospitalization with bed rest, diet (low sodium and low calorie as indicated), diuretics, and anti-hypertensive drugs. The induction of labor may be indicated if control is poor and the pregnancy has advanced to about 36 weeks. Once pregnancy is terminated, the disease process tends to revert to normal.

Eclampsia calls for rigid evaluation and treatment. These patients are critical. Convulsions are controlled with phenobarbital. The patient must be kept in a darkened, quiet room with constant attendance. The vital signs including fetal heart tones must be recorded every 30 minutes. Emergency equipment should be readily available including oxygen, tracheostomy set, and emergency drugs. The blood pressure is best controlled by an intravenous drip of 10 mg. reserpine and 40 mg. hydralazine in 1000 cc. 5 per cent D/W.[4] Blood pressure should be lowered to a range of 140-150/90-100. Diuretics are administered and urine output should be measured hourly. Labor should be induced with I.V. oxytoxic as soon as the patient's condition stabilizes (12-30 hours). Cesarean section may be indicated if vaginal delivery is not feasible or if the patient's condition is deteriorating during the trial labor. ★★★

111 North St.

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TWO WAY STOP

A woman driving the school car pool—eight children in the family station wagon—ran through a stop sign. A police officer motioned her to the curb with this query: "Listen, lady, don't you know when to stop?"

"Goodness, yes," was the cheerful reply, "only two of them are mine."

Radiologic Seminar XXXII: Nephrocalcinosis

RAMON R. LUINA, M.D.
Meridian, Mississippi

NEPHROCALCINOSIS is a term used to describe the presence of multiple calcific foci in the parenchyma of the kidney. The process is usually bilateral and can be seen in a number of unrelated conditions including: hyperparathyroidism, chronic pyelonephritis, chronic glomerulonephritis, thyrotoxicosis, idiopathic hypercalcemia in children, hypervitaminosis D, milk alkali syndrome, renal tubular acidosis, sulfonamide intoxication, medullary sponge kidney, neoplastic disease, primary oxaluria, and sarcoidosis. In some instances, the cause is unknown.

Pathologically, the calcium deposits may be located (1) in the basement membrane of the collecting tubules, (2) within the cytoplasm of the tubular epithelial cells, (3) in the interstitial tissues, (4) as small tubular calculi. Calcium deposits confined to the area of the renal pyramids is the commonest x-ray finding. The calcium deposits seen in the roentgenogram may be fine and feathery and, less often, coarse granules. The distal collecting tubules and the Loop of Henle are involved in this common type of calcification which are confined to the renal pyramids.

Hypercalcemia and hypercalciuria are the common denominator to many disease processes in which nephrocalcinosis is present. Perhaps the best known disease process associated with renal calculi or nephrocalcinosis is hyperparathyroidism. Sarcoidosis is another disease associated with nephrocalcinosis. The incidence of hypercalcemia in this entity has been estimated to be from 5 to 30 per cent of the cases.

CASE PRESENTATION

A 20-year-old white male was seen for the first time on June 11, 1963 with complaints of nausea, constipation, and a mass in the upper abdomen which he had noticed about a month previously. On physical examination, the outstanding findings were a firm, nontender mass in the left upper abdomen which moved with respiration and small shotty nodes present bilaterally in the cervical, axillary, and epitrochlear area. The lungs were clear on physical examination, and a chest film showed no abnormalities.

Figure 1. A PA radiograph from the GI series, showing displacement of the stomach by an enlarged spleen.

Sponsored by the Mississippi Radiological Society.

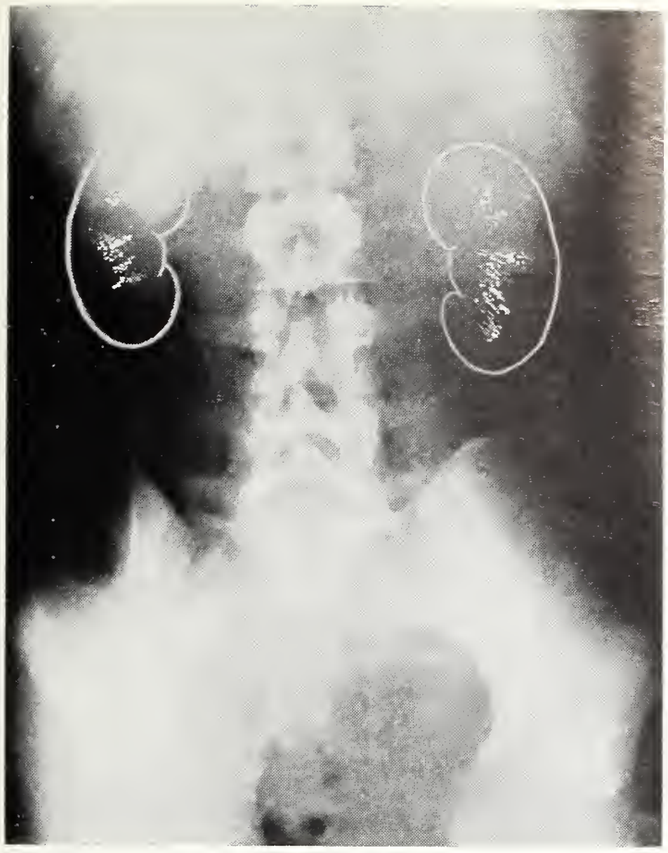

Figure 2. A radiograph from the intravenous pyelogram study with the outline of the kidneys and the calcific deposits being accentuated for purposes of clarity. The calcification is frequently rather subtle and difficult to show on reproductions.

LABORATORY WORK

The red and white blood cell count, platelet count, and blood sugar were normal. The most important laboratory findings were as follows:

(1) Urinalysis	sp. gr.	1015
	albumin	trace
	sugar	negative
(2) B. U. N.	37 mg. %	
(3) Serum calcium	16.4 mg. %	
(4) Serum phosphate	3.8 mg. %	

An upper GI series (Figure 1) showed extrinsic pressure upon the stomach by a mass in the left upper abdomen. There were no intrinsic abnormalities. An intravenous pyelogram (Figure 2) showed bilateral renal calcifications distributed in the pattern of renal calyces. A schematic drawing of the left renal area is shown in Figure 3, showing the distribution of the punctate calcification in relation to the kidney outline.

A bone marrow biopsy was reported by the pathologist as follows: These are definite multiple granulomatous lesions which most likely are due to Boeck's sarcoid in view of the histological features and clinical information. ★★★

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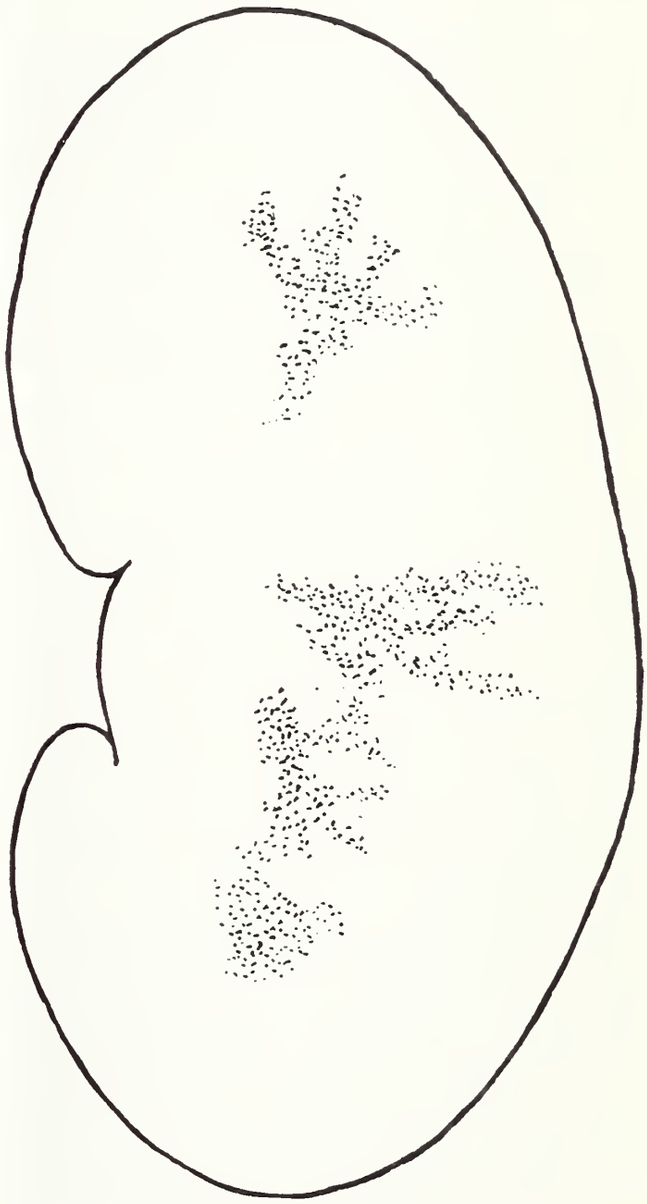

Figure 3. A schematic drawing of the left renal area, showing the distribution and pattern of the parenchymal calcification in relation to the kidney outline.

Clinicopathological Conference LIX

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

Discussion in CPC LIX is conducted by students at the University of Mississippi School of Medicine. The patient is a 35-year-old pine veneer plant worker who was admitted with the chief complaint of hemoptysis. He had been in good health all his life except for a chronic productive cough which had bothered him for 10-15 years. He had smoked more than one pack of cigarettes a day for 15 years, and for the past four years he had had chronic gingival infections and several tooth extractions.

Discussers are Joseph Baird, Donald Hall, James Keeton, Donald Bomer, and Gary Nye. Dr. Robert D. Sloan presents the radiological report, Dr. Joel Brunson the autopsy report, and Dr. Herbert G. Langford discusses the patient's clinical history.

This was the first University Medical Center admission for this 35-year-old white, male, pine veneer plant worker with the chief complaint of coughing up blood. He had been in good health all his life except for the fact that for the past 10-15 years he had had a chronic productive cough which was worse in the morning. He had smoked more than one pack of cigarettes a day for 15 years. For the past four years he had had chronic gingival infections and several tooth extractions. In January 1964 he had a left herniorrhaphy.

However, the patient had done well until early April 1964 when he had an episode of hemoptysis in which he coughed up one-half to one cup of dark, old blood. He saw his local physician who hospitalized him for two days. He received unknown treatment and was returned home for one day. The next day he developed severe occipital headache and stiff neck and was readmitted to his local hospital and treated with cervical traction without much benefit. However, he remained in the hospital for two weeks in Wiggins and was treated for a "lung infection" with penicillin and other antibiotics. His hemoptysis cleared during the hospitalization, but he continued to have cough with increasing amounts of purulent sputum. He lost weight (about 30 pounds in 4-6 weeks), and began to have mild dyspnea. He was not thought to be febrile during this time but he had had some night sweats, decreased appetite, and progressive weakness. After two weeks in a local hospital he returned home. The last of April 1964 there was another episode of hemoptysis and again he was admitted to the Wiggins Hospital for four days and arrangements were made for admission to the University Medical Center.

On entering the University Medical Center on May 6, 1964, the patient denied exposure to tuberculosis, but had worked in areas with a lot of pine sawdust. He was initially admitted to surgery for bronchoscopy where on physical examination he was found to have a blood pressure of 140/70, pulse 108, temperature 98.2°. He was a thin white male with obvious signs of recent weight loss. He was well oriented with a limited range of motion of his head and neck. There was no muscle spasm of the neck but tenderness was present over the sub-occipital region bilaterally. Chest examination revealed increased resonance to percussion with dry crackling rales at both bases and scattered expiratory wheezes. The heart had a regular rhythm without murmur. There was no abdominal organomegaly. There was marked clubbing of the fingers without cyanosis. The remainder of the examination was negative.

Laboratory data on admission were as follows: Hemoglobin 11.8 gm., hematocrit 37, WBC 14,150, monocytes 990, lymphocytes 1,981, basophils 141, segmented neutrophils 8,348, bands

2,688 with increased platelets. Urine specific gravity was 1.006, protein and sugar were negative with 0-3 WBC/HPF. BUN was 10 mg. per cent, FBS 108 mg. per cent, prothrombin time 50 per cent with a factor X deficiency. VDRL was negative. Sputum smears for AFB and fungus on numerous occasions were negative and routine cultures grew out alpha-strep., *Neisseria* and light growth staph. epidermis and *Hemophilus influenzae*.

X-RAY DATA

X-rays of the cervical spine were read as negative by the radiologist but the neurology consultant thought there might be a lytic lesion at C_1. Chest x-rays revealed far advanced cystic disease of the lungs with fibrosis and emphysema. Scarring and pleuritic reactions were seen in the area of the left hilum. The heart appeared normal. A bone survey for metastatic disease was normal. EKG showed notched P waves with QRS axis of –50 degrees suggesting left ventricularity. Sputum Pap smears were class II and III. Pulmonary function studies showed combined obstructive and restrictive impairment.

Bronchoscopy was attempted on admission, but because of the neck pain, this could not be done. The patient was therefore started on bronchial toilet with Choledyl, streptomycin, penicillin, postural drainage, Isuprel nebulization and was also started on cervical traction and tranquilizers for his neck. Since there seemed to be no real change in his condition he was transferred to the medical service on May 16, 1964. Skin tests for all fungi and intermediate PPD were done and were all negative. The patient continued to complain of neck pain and now his sputum grew out a heavy growth of *Alcaligenes faecalis*. A serum calcium was 7.5 mEq/L, phosphorus 2.1 mg. per cent, TSP 6.7 gm. per cent with 2.6 gm. albumin and 4.9 gm. globulin. WBC was 20,550, hemoglobin 11.8 gm., hematocrit 36, urinary Bence Jones protein was negative, alkaline phosphatase 11 K-A, SGOT 27.

CLINICAL COURSE

From May 11, 1964 to May 20, 1964 the patient gradually became confused and had to be restrained on May 20, 1964. He also developed a tremor of his hands at this time. An LP was done which showed one poly, CFS protein of 51 mg. per cent, glucose 75 mg. per cent. Serum electrolytes were: chloride 104 mEq/L, CO_2 C.P. 29 mEq/L, potassium 3.9 mEq/L, sodium 139 mEq/L. A repeat calcium on May 23, 1964 was 8.1 mEq/L, phosphorus 2.6 mg. per cent, alkaline phosphatase 11 K-A units, and BSP and bilirubin were normal. Serum osmolarity was 298 mosm., and a 24 hour urine had 2,730 cc. volume, with 1,128 mg. calcium, 1.1 gm. creatinine, 1.9 gm. phosphates. BUN was 50 mg. per cent.

The patient's mental status continued to deteriorate with increasing confusion and the onset of hallucinations. He was found to have a fecal impaction which was removed. On May 23, 1964 all medications were stopped and on May 24, 1964 he spiked temperature to 101.5° for the first time. By this time he was quite lethargic. He was started back on penicillin and chloramphenicol. X-rays of the skull, jaw, and hand at this time were normal. However, physical examination revealed conjunctivitis, and a gray opacity at the limbus of the right eye.

He was started on prednisolone phosphate 40 mg. I.V. over 24 hours and fluids were forced to keep the urine output greater than 3,000 cc/day. There was gradual improvement in the patient's mental status so that by May 29, 1964 he was well oriented and was afebrile with much less neck pain. Fluids continued to be pushed to 5,000 cc/day with output at least 3,000 cc. daily. His hemoglobin fell to 7.5 gm., but the patient had bleeding from an injection site the night of May 27, 1964 which amounted to 200-400 cc. of blood. One May 29, 1964 calcium was 5.4 mEq/L and phosphorus was 1.9 mg. per cent. Laminagrams of the neck at this time showed a lytic lesion at C_1. He was continued on 40 mg. of prednisolone daily.

On June 2, 1964 bronchoscopy and scalene node biopsy were done. Purulent secretions were seen from all orifices. The scalene node was normal on section and the Pap smears from bronchoscopy were class III. He continued to ooze from the biopsy site and the hemoglobin fell to 5.9 gm. Coagulogram showed a prothrombin time of 30 per cent with factor X deficiency. The patient was given two units of whole blood and the bleeding gradually stopped. Culture from bronchoscopy grew out *Klebsiella* and coagulase positive staph. The patient continued to cough up one-half to one cup daily of purulent blood tinged sputum, but there continued to be improvement in his sense of well being and in his mental status, although there was a progressive weight loss.

Neurosurgery was asked to biopsy the cervical lesion, but they felt it would be too dangerous. A repeat chest film on June 8, 1964 showed a mass lesion in the left hilar area. Surgery was reconsulted for repeat bronchoscopy but on June 10, 1964 at 5:30 p.m. the patient suddenly began

coughing up copious amounts of blood and necrotic tissue and within 4-5 minutes had exsanguinated.

DISCUSSION

Dr. Herbert G. Langford: "We are starting off this year's conferences by really putting our best foot forward; the senior students are discussing today's case."

Joseph Baird: This was the first UMC admission of a 35-year-old white male, a pine veneer plant worker from Wiggins, Miss. He was admitted May 6, and he expired 35 days later on June 10. He had been in good health prior to the onset of his present illness except he had smoked for approximately 15 years and had had a chronic productive cough for 10 or 15 years which was worse in the morning.

"In early April 1964 he experienced an episode of hemoptysis, when he produced about one-half to one cup of dark blood. He was hospitalized by his local doctor for two days and received unknown treatment. He was discharged to his home and subsequently developed a severe occipital headache with a stiff neck. He was readmitted to his local hospital and was treated with cervical traction without benefit. He remained in this hospital for approximately three weeks during which time he was treated with penicillin and other antibiotics for a 'lung infection.' His hemoptysis cleared, but he continued to cough with an increase in production of purulent sputum. He was losing weight and had lost approximately 30 lbs. in the 4-6 weeks prior to his admission here. He was sent home after two weeks' hospitalization and apparently did satisfactorily until the latter part of April when he had another episode of hemoptysis and was readmitted to his local hospital. After four days he was referred here.

"On admission, he gave no history of exposure to tuberculosis. Physical examination revealed a blood pressure of 140/70, pulse 108, and temperature 98.2°. He was a cachectic individual with limited motion of his head and neck and bilateral tenderness over his suboccipital region. Chest examination revealed increased resonance to percussion, dry crackling rales over both bases, and scattered expiratory wheezes. There was marked clubbing of the fingers without cyanosis. These were the pertinent physical findings.

"His hemoglobin on admission was 11.8 gm. per cent, hematocrit 37 per cent, WBC 14,150 with shift to the left. His urinalysis was within normal limits and his BUN and blood sugar were within normal limits. He had a prothrombin time of 50 per cent with a factor X deficiency. Smears of sputum for acid fast bacilli and fungi were negative on numerous occasions and on routine culture of a sputum only alpha-strep., *Neisseria,* Staph. epidermis and *Hemophilus influenzae* were grown out.

"X-rays of the cercival spine were interpreted by the neurology consultant as revealing a lytic lesion at C_1. Chest x-rays were interpreted by the radiologist to reveal advanced cystic disease of the lungs with fibrosis and emphysema and scarring and pleuritic reaction at the left hilum. A bone survey for metastatic disease was interpreted as being normal by the radiology department. Pap smears of sputum were classed II and III. Pulmonary function studies revealed combined obstructive and restrictive impairment. The EKG findings of this patient are explainable on the basis of pulmonary emphysema. Bronchial toilet was instituted; he was being treated with Choledyl, streptomycin, penicillin, postural drainage, and Isuprel nebulization. He was treated with cervical traction and tranquilizers for his neck pain.

"He was transferred to the department of medicine on May 16—19 days after his admission. Skin tests were negative for all fungi and for intermediate PPD. Sputum cultures grew out only a heavy growth of *Alcaligenes faecalis.* His chemistries revealed an elevated calcium and a slightly decreased phosphorus. His total serum proteins were 6.7 gm. per cent with reversal of the AG ratio. His WBC was 20,550, hemoglobin 11.8 gm. per cent and hematocrit 36. His urinary Bence Jones protein was negative. Alkaline phosphatase and SGOT were normal.

"From May 11 until May 20 his condition further deteriorated. He became confused and he developed a tremor. A LP was done and was essentially within normal limits. His serum electrolytes were within normal limits except for a decreased phosphorus and an elevated calcium on May 23. His BSP and bilirubin were within normal limits. His BUN was elevated to 50 mg. per cent and he had an increased calcium and phosphorus excretion in his 24 hour urine. He experienced increasing confusion and developed hallucinations.

"On May 23 all medications were stopped and on May 24 his temperature spiked at 101.5°. Treatment with penicillin and chloramphenicol was resumed and prednisolone phosphate, 50 mg. I.V. daily, was begun. Fluids were forced. On May 29 he was well oriented and afebrile with less neck

pain. He continued losing weight. His hemoglobin had decreased to 7.5 gm. per cent. However, on May 27 he had lost approximately 200-400 cc. of blood from an injection site. On May 29 his calcium was within the normal range, and his phosphorus remained decreased below normal.

"Laminagrams revealed a lytic lesion at C_1. On June 2 bronchoscopy was done and purulent secretions were seen coming from all orifices. Pap smears from bronchoscopy were class III and culture grew out *Klebsiella* and coagulase positive staph. A scalene node biopsy was done and was normal on section. He continued to bleed from his injection site, and his hemoglobin decreased to 5.9 gm. per cent. His prothrombin time was 30 per cent with a factor X deficiency, and he was given two units of whole blood. He continued to cough, producing as much as one-half cup of purulent blood-tinged sputum and experienced a progressive weight loss. A chest film on June 8 revealed a mass lesion in the left hilar area. On June 10 he began coughing up blood and necrotic material and exsanguinated within 4-5 minutes after the onset. Dr. Sloan, if you will, give us the x-ray report."

RADIOLOGIST'S REPORT

Dr. Robert D. Sloan: "There are two areas of interest on the films, the first relating to the cervical spine. A gross destructive lesion of the right side of the body of C_1 is demonstrated on both routine films and laminography. The odontoid process of C_2 appears intact as does the left side of C_1. A destruction of the type demonstrated can be produced either by metastatic neoplasms or an infectious process. Statistically, a neoplastic process would be far more likely. The other area of interest relates to the chest. Here also there is gross pathology, lying predominately in the left lower lobe.

"On the admission study there is a large cystic-containing-like lesion with thin walls in the upper segment of the lobe, and the entire lobe is somewhat diminished in volume with the mediastinum being shifted somewhat to the left. The right lung is normal in appearance. On a film obtained roughly one month later the pattern had changed somewhat. There is now a mass-like density in the base of the thin walled cavity with somewhat lobulated borders, as well as a small amount of fluid. The mass could represent several things, including a tumor, a so-called fungus ball floating free in the cavity, or inspissated pus or blood clots. The final film was taken on the day of death. I don't know its relation to the time he started having gross hemoptysis but the fluid level is more apparent, and there is secondary extension of the process down into the lower part of the lung."

DIAGNOSTIC POSSIBILITIES

Donald Hall: "In a patient with a history of smoking, hemoptysis, dyspnea, weakness, and weight loss, of primary concern would be the possible diagnosis of bronchogenic carcinoma. In bronchogenic carcinoma the signs and symptoms are often related to the location of the tumor. If on the pleura, the patient could present with pleurisy and have a serous or bloody pleural effusion. If a bronchus is occluded, dilatation of the bronchus, bronchiectasis, pneumonitis, or abscess formation could occur distal to the occlusion. If the tumor is located in the apex, it may erode a rib, paralyze the sympathetic chain with a subsequent Horner's syndrome, or you may see impingement on the ulnar, median, recurrent laryngeal or phrenic nerve. Incomplete obstruction can lead to unilateral wheezing with an obstructive emphysema picture. With ulceration, you may either have blood-streaked sputum or recurrent hemorrhages. The tumor itself may undergo central necrosis with abscess cavitation, and a bronchial fistula may occur. With irritation of the diaphragmatic pleura, the patient could present with pain of phrenic nerve distribution.

"Bronchogenic carcinoma is probably the most prominent nonendocrine tumor to show systemic manifestation without actual metastasis. Bone and joint changes are frequently seen. In this patient clubbing was evident. Periosteal proliferation of long bones, particularly the tibia, has been described in patients with bronchogenic carcinoma. Often you see marked joint changes with migratory, painful joint involvement. Gynecomastia, although not mentioned in the protocol, is often seen in males with this disease. It is thought to be caused by an increased adrenal estrogen production coupled with a decreased androgen production. Some of these patients appear to have Cushing's disease, and it is thought that the tumor either produces a substance that stimulates the pituitary or produces a cortisone-like substance.

"The most common tumor presenting with a nonthymic myasthenia picture is also bronchogenic carcinoma. If the tumor is removed, the myasthenia is totally alleviated. Serum electrolyte imbalances are often seen with bronchogenic carcinoma. Hyponatremia occurs which actually is more of a water intoxication syndrome than true hyponatremia. It is thought that the tumor in some way affects ADH secretion. The most prominent

electrolyte imbalance which is seen with a pulmonary neoplasm is hypercalcemia. At some time during the natural history of bronchogenic carcinoma, 10 per cent of these patients have a hypercalcemia. The possible mechanism of the hypercalcemia in bronchogenic carcinoma will subsequently be discussed by another student."

FUNGUS DISEASES

James Keeton: "Besides carcinoma of the lungs, which was just discussed, it is possible that this patient could have a fungus disease such as histo, blasto, or maybe even TB because he does present with hemoptysis, and you can have a hemoptysis with all of these. It says in the protocol that he has a negative skin test for these and TB but in an overwhelming infection such as TB you can have a negative TB skin test. Bronchial washings were also done but the protocol doesn't mention the fact cultures were obtained for this so you can't say positively whether the patient does or does not have a fungus disease without a definite culture diagnosis."

HYPERCALCEMIA

Donald Bomer: "A great deal of attention has been given to the topic of hypercalcemia in recent years. This patient had a serum calcium of 7.5 mEq/L on May 16, 1964, 8.1 mEq/L on May 23, 1964, and 5.4 mEq/L on May 27, 1964. Two of these are definitely elevated and the other is at the upper limits of normal at least. This is interesting from two standpoints—the etiology of the elevated calcium and the symptoms which hypercalcemia can produce. Some of the symptoms exhibited by this patient can be explained on the basis of hypercalcemia. Gastrointestinal symptoms produced by hypercalcemia include anorexia, nausea, vomiting, and constipation. This patient definitely was anorexic. Skeletal symptoms in this patient consisted only of neck pain but a lytic lesion was noted on cervical x-ray at C_1. Hypercalcemia can produce nondescript aches and pains, tender bones, arthralgia, muscular atrophy, joint swelling and overt arthritis. Urologically, elevated calcium can cause polyuria and nephrolithiasis which can progress to nephrocalcinosis and eventually renal failure. Psychologically, hypercalcemia can produce personality changes, lethargy, paresis, psychosis, and even coma. It has been shown by several groups that there is no direct relationship between the level of serum calcium and the symptoms which are produced or the severity of these symptoms.

"Many disease entities have been described which are associated with or produce hypercalcemia in some way. Sataline, Powell, and Hamwi of Columbus, Ohio, have classified them in an article as follows:

I. Endocrine
   A. Parathyroid
      1. Primary hyperparathyroidism
      2. Secondary hyperparathyroidism
         a. Vitamin D resistant rickets
         b. Chronic renal insufficiency
      3. Milk-alkali syndrome
   B. Thyroid
      1. Hyperthyroidism
      2. Myxedema
   C. Adrenal
      1. Addison's disease
      2. Postoperative adrenalectomy in Cushing's disease
      3. Adrenocorticoid therapy withdrawal
   D. Sex hormones
II. Malignancy
   A. Bone
      1. Myeloma
      2. Metastatic tumor
   B. Tumors not involving bone
      1. Carcinoma
      2. Lymphoma
      3. Leukemia
III. Immobilization hypercalcemia
IV. Vitamin D excess
   A. Vitamin D intoxication
   B. Infantile hypercalcemia
   C. Sarcoid

"In view of the patient's history, hospital course and diagnostic studies I would like to turn to the tumors without bone involvement. It has been reported that hypercalcemia can occur in renal cell carcinoma, squamous cell carcinoma of the vulva, squamous cell carcinoma of the gingiva, squamous cell bronchial carcinoma, carcinoma of the transverse colon, carcinoma of the cervix, endometrial carcinoma, carcinoma of the pancreas, and hepatomas. The mechanism whereby these tumors cause hypercalcemia is disputed. There has been a parathormone-like substance obtained from these malignant neoplasms which may elevate the serum calcium in a similar manner as the parathyroid hormone. The information on this subject is not completely clear and it will be interesting to see what investigators find concerning this.

"Sarcoid should be mentioned since it has also been considered in the differential diagnosis. The mechanism by which hypercalcemia develops in some 20 to 30 per cent of those afflicted with sarcoid is not clear. There is some evidence that it is similar to that of hypervitaminosis D. These people seem to have an increased sensitivity to vitamin D and exposure to sunlight produces hypercalcemia which accounts for the increased complications from hypercalcemia in the summer months.

"As a general diagnostic test it has been shown that cortisone will decrease the calcium level in most of the cases except where there is hyperparathyroidism due to a parathyroid adenoma. This patient was on prednisolone, and his calcium level did decrease to 5.4 mEq/L some 2 weeks before his death."

Gary Nye: "Two of the other presenting complaints that this patient had were neck pain and occipital headaches, and these are most likely explained by the lytic lesion which was observed in C_1 on x-ray. As suggested by Dr. Sloan, this could be caused by a number of infections, but statistical evidence would point to a neoplasm. Relating this to the patient's clinical history, an osteomyelitis was mentioned which could refer back to his history of teeth extractions. Also tuberculosis frequently presents with lesions of the spine and very frequently you see a solitary lesion in the cervical region as was noted with this patient. However, with respect to neoplasms there are several metastatic groups that can present a picture similar to this patient's. Metastases to the bone from neoplasms is not extremely common; however, in certain groups there does seem to be more of a propensity to metastastize to this area than with other types of malignancies. Breast, prostate, kidney, lung and thyroid are the ones most noted for spinal involvement.

"Frequently the first sign of these diseases is the bone lesions—either as discovered on x-ray or through pain such as was experienced with this patient. Whenever they do have a lesion of the bone, the most common presenting complaint is pain. Multiple myeloma also can present a picture such as this, which we must rule out by referring to his clinical history as outlined in the protocol. Myeloma often can mimic these other neoplastic diseases, and one must be careful never to rule it out on the basis of a single lesion as observed on x-ray.

"The groups of neoplasms that can metastasize to the bone are generally catergorized as osteoplastic or osteolytic lesions. Some attempts have been made to refine this rough grouping and identify the various sources of the neoplasm by gradations of each of the two categories. However, this latter classification is not always consistent and generally should not be attempted. Usually you can find, if you look hard enough, examples of both osteoplastic and osteolytic manifestation with all types in the separate groups of neoplasms. Certain ones, however, seem to generally fall into an osteoplastic or osteolytic category. Cancers of the breast show both characteristics and are particularly noted for this versatility. Those that tend to be lytic most notably are hyponephromas, cancer of the thyroid, carcinoma of the bowel, and neuroblastomas. The case at hand is a lytic lesion, and we are more seriously considering carcinoma of the lung. Bronchogenic carcinoma metastasis to the bone is more frequently an osteolytic lesion, though occasionally osteoplastic lesions are seen. The most frequent cause of an osteoplastic lesion is cancer of the prostate. I will now turn the discussion back over to the moderator."

FINAL DIAGNOSIS

Joseph Baird: "It is the consensus of our group that the diagnosis of this case is bronchogenic carcinoma with metastasis to the first cervical vertebrae and a distal abscess secondary to obstruction and stasis. The immediate cause of death was exsanguination secondary to erosion of an artery. Although we can not rule out a fungal infection or primary bacterial abscess, we statistically feel that bronchogenic carcinoma is the most likely diagnosis. Dr. Langford."

Dr. Langford: "I shepherded this fellow on to Dr. Brunson and so I think I will do any further commenting after he tells us just how things came out."

AUTOPSY REPORT

Dr. Joel Brunson: "Well, I think this case probably points up a couple of things, and one of these is that either we are recognizing things now that have been occurring all along, or else the biologic behaviour of tumors is changing. This is a primary tumor of the lung—bronchogenic carcinoma. It was chosen for discussion because of its peculiar relation in some manner to changes in serum calcium. There are many aspects of this case which will warrant discussion along those lines. A good many cases have been reported, as has already been alluded to, in which tumors act like endocrine glands in some respects. Some of them are involved in the secretion or production of hormones that resemble adrenal cortical hormones, or ACTH. Some, like this one, are involved in pro-

duction of hormones which look or act like parathormone.

"The abscess cavity in the lung was in the left posterior portion of the lobe, and the bronchus communicated directly with this large cavity. It was empty on autopsy. We think most of this material was coughed up by the time the patient came to autopsy, since there was blood in and around the mouth, and mixed up in the blood there were fragments of pulmonary tissue. Microscopically, sections showed a frank carcinoma which in some areas was not well differentiated. A good deal of pleomorphism was present; this was evidently a bronchogenic carcinoma. In some areas there was a beginning grouping, or tendency of the cells to group together, while in other areas the tumor cells clung together and resembled a poorly differentiated squamous type carcinoma. Microscopically, the wall of the abscess cavity had not only necrotic tissue, but it had a lining of tumor cells within, so it was invaded by the spread of this tumor. I suspect that parts of the tumor were also expectorated along with parts of the lung. Other areas of the tumor were much better differentiated, and there were evident squamous cells with cornification. So, in essence, this was a squamous cell carinoma, derived from the left bronchus in the upper portion of the lower lobe.

"Both of the lungs were heavy grossly in addition to the left lung in which the major pathology was present. The right lung was heavy, edematous, and contained hemorrhage, weighing about twice the usual weight. Microscopically and grossly, this patient also had emphysema in addition to carcinoma. This is, I think, somewhat unusual for a patient of this age—35 years. In addition to that, in the left lower lobe there was frank bronchiectasis with marked cylindrical dilatation—dilatation of the bronchi and bronchioles, and with a good deal of purulent, mucopurulent, and hemorrhagic material present.

"The heart was not remarkable, and the next organs of interest were the kidneys. Each of these was about twice the usual weight. There was extensive replacement of the kidney by metastatic tumor, which had a rather peculiar pattern in that it tended to spread out rather diffusely. It appeared to originate in the medullary portions of the kidneys, at least it was largely confined to that area of the kidney. When we saw this grossly we wondered whether this patient might not have a lymphoma in addition to primary tumor in the lungs because this is the pattern that one might associate with that disease. Microscopically, however, this is squamous cell carcinoma, metastatic from the primary tumor in the lung. A good deal of the kidney has been replaced by masses of tumor cells, and apparently individual tumor cells lie out in the parenchyma of both kidneys. The liver, interestingly enough, was free of tumor, as was the spleen. There were a couple of small metastatic lesions in the right adrenal medulla but none on the left side.

"Because of the changes in calcium, Dr. Thomas B. Walden inspected the parathyroid glands. The only one he was able to find was not enlarged. Microscopically this had the usual histologic picture of the parathyroid gland. We did not have a bone slide and the lesion in the vertebrae was a little bit out of our reach. There were no evident lesions elsewhere in the bone. We would presume, or assume, that this was probably a metastatic lesion in the first cervical vertebrae. It may be of interest to note, in passing, that the central nervous system was completely without pathology, there being no gross or microscopic metastatic lesions in the brain.

"A question has been brought up relative to production of hormones or hormone-like substances by malignant tumors. There are reports, for example, that oat cell carcinomas of the lung are apt to produce one type of hormone, and squamous cell carcinomas of the lung be associated with production of a different type. Also, in those endocrine-like tumors that have been reported, the malignant tumors of the kidney, primary malignant tumors of the kidney, have been said to be associated more often with production of parathormone than has carcinoma of the lung and this brings about the question as to what is the role of the environment in which the tumor grows. Is there something peculiar about the renal metastases in this case which may be associated with production of what looks like parathormone? As I indicated at the beginning, we are getting around to finding some peculiar things about tumors. We went through the era, a year or so ago, in which it was pointed out that carcinoma of the lung in particular may be associated with diffuse, peculiar thrombi in many of the small vessels, particularly in the spleen and in the kidneys. Then we have gone through the era of pancreatic tumors, many of which may be associated with thrombosis of peripheral veins as an early diagnostic sign. This case is a patient with a tumor which apparently has some endocrine function and which is also associated with changes in coagulation of the blood. Dr. Langford, would you

have any additional comments about any of these?"

CLINICAL PICTURE

Dr. Langford: "First about the interpretation of the clinical picture as he was on the ward—we knew about the hypercalcemia and we knew about the lung disease. This narrowed it to two rather different things, i.e., sarcoid vs. carcinoma of the lung. Once this metastatic lesion clarified itself, that settled it. Before that though, the patient did have hyperglobulinemia presumably related to his chronic infection and so this was confusing. One team felt that his rapidly progressing clubbing plus smoking history was enough to throw it over to the carcinoma side and make it so we didn't have to worry about sarcoid as a cause. You note that the calcium fell rapidly. We think that this was a true bill and not just wandering laboratory numbers. Steroids were once a sure way to tell sarcoid hypercalcemia from other hypercalcemias; this is no longer sure. But hypercalcemia due to a parathyroid adenoma rarely falls. Hypercalcemia due to sarcoid almost always falls when steroids are given and that due to a lung lesion may or may not fall so it was of no diagnostic help for it to fall, but we thought that he was getting into difficulty from hypercalcemia per se. This causes rapidly progressive renal damage, rapid dehydration, and CNS symptoms, and it was worth while to treat him for that alone.

"Back to this interesting tumor—a carcinoma of the lung is an endocrine tumor. We originally thought that the hypercalcemia that was seen was due to the extensive metastatic disease and lytic lesion. This may be true at times with some of the metastatic disease. The evidence for the lung being an endocrine tumor has to come from several demonstrations. Some of these have on removal of the tumor had prompt fall of the calcium to normal levels—then on regrowth of metastases the hypercalcemia returns. So in that way it is acting as if it were a direct tumor secretion. This therefore would rule out an obligatory role for renal metastases also in the production of this. Why this is so potent in its ability to produce various endocrine disease I don't know. The reason I wanted to know about the bone was to see whether you had the increased osteoid seen in parathormone excess. Now back to the parathyroid adenoma appearance. It now seems clear that there is another hormone controlling calcium metabolism that is called calciatonin that is said to be a calcium lowering hormone. Some people say this is from the thyroid and some people say it is from the parathyroid. Now here is a chance for at least transitory fame for you to pick out from this parathyroid gland hyperplasia of the cells that cause calcium lowering because presumably under hypercalcemia—these cells will be stimulated."

Dr. Brunson: "This is a fairly young man, too, for primary carcinoma of the lung. Is there any age group in which so-called endocrine malignant tumors have been reported? Is there any trend?"

Dr. Langford: "I don't know of any reported trend. If I quickly ran through mine, I would put them—the lung ones—in the younger age groups, but it also seems to me that the young ones are the ones that get the really bad tumors. The chap who started smoking at 14 has really devoted his life to it and these are the ones in whom I think I have seen the endocrine tumors—it probably wouldn't stand up under statistical breakdown."

Dr. Brunson: "It just seems out of reason for squamous cell to be secreting hormones—one wonders whether there may be some intermediate mechanism."

Dr. Langford: "In a few of these something that resembles parathormone has been found by various assays. Amount per gram of tissue is much less than the parathyroid gland but there are so many more grams here than in the parathyroid gland—a reasonable amount is present." ★★★

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NO LUXURY

Longevity is a necessity not a luxury these days. Men have to live longer to get their payments completed.

The President Speaking

'Opportunity for Service'

OMAR SIMMONS, M.D.
Newton, Mississippi

THE OPPORTUNITY is great, the need is clear, and the purpose is meritorious. This sums up the annual appeal of the American Medical Association Education and Research Foundation to physicians. The work of this organization has become progressively more important, and it is now the largest single voluntary financing mechanism for medical education. Both its gifts to the 88 approved schools and the student-intern-resident loan program have strongly benefitted tomorrow's generation of physicians.

The regularly distributed grants based on a uniform amount per student have been especially valuable to the medical schools. The educators tell us that this unrestricted money is especially useful in that it can be applied to the area of greatest need. This freedom of application is clearly in the spirit of AMA-ERF. The loan program generates $12.50 of credit for every $1 dedicated to it. The loans are made through banks at reasonable rates of interest. It will, therefore, perpetuate itself, assuring a growing reservoir of financial assistance for deserving young men and women preparing themselves for a medical career.

Activities of AMA-ERF are being extended in the tobacco-health area and pure research in the life sciences. There has been some criticism of the former, because the multi-million dollar venture is financed by the tobacco industry. But the providers of the funds have no sayso as to their use, this being reserved for AMA-ERF as a scientific body. The research institute in the life sciences has largely been brought to its present state of development through AMA treasury grants.

We are proud that our Woman's Auxiliary has done such splendid service in contributing to AMA-ERF, and the current year promises to establish new highs. Our physician members contribute, but we need more voluntarily participating. There are few endeavors in this day and age that make a dollar do so much for so many in so splendid a cause. ★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume V, Number 12

December 1964

Nursing Home Accreditation: Challenge for Better Care

I

No single aspect in total health care of the aging seems to be more important than the development and upgrading of nursing homes. Until recent years when a growing awareness of the importance of nursing homes was demonstrated, the picture was something of a mishmash, lacking any semblance of uniformity, quality standards, and realistic licensure criteria. To be sure, there were then many excellent nursing homes, just as there are now many poor ones. What is encouraging is the surge of interest in improving these facilities and what is being undertaken to achieve this goal.

The National Council for the Accreditation of Nursing Homes is scarcely over a year old. Already, it is fulfilling a major role on the health care scene and encouraging an uplift in nursing home standards. NCANH is sponsored by the American Medical and American Nursing Home Associations. Its by-laws permit the addition of other sponsors. It is governed by a nine member board of directors consisting of five physicians and four nursing home administrators. In a nutshell, the council's objectives are:

—To establish and conduct an accreditation program which will foster standards of professional nursing home care under medical supervision throughout the United States.

—To establish and promote sound principles of organization and administration in these facilities.

—To promote the establishment and improvement of essential services in these nursing homes.

II

Any nursing home—governmental, nonprofit, or proprietary—is eligible to apply for accreditation, provided the applicant institution possesses a state license. The accreditation program does not extend to institutions which have the principal function of providing residential or domiciliary care, but infirmary units in such facilities may be considered under the program.

Each applying institution is examined and evaluated by the council on the basis of written standards. And even these criteria are under constant review for improvement. Facilities receiving accreditation fall into one of three categories:

—*Intensive Nursing Care Facility*. Nursing service is under the supervision of a full time registered professional nurse, and such an individual is on duty at all times.

—*Skilled Nursing Care Facility*. Nursing service is under the supervision of a full time registered professional nurse, and either such an individual or a licensed practical nurse is on duty at all times.

—*Intermediate Care Facility*. Nursing service is under the supervision of a full time registered professional nurse or a full time licensed practical nurse. An attendant is on duty at all times, and at night, the attendant is awake and dressed.

Application for accreditation is made to NCANH and a survey fee of $75 plus $1 per bed is paid. After ascertaining the status of the facility from the state licensing body, an experienced surveyor is assigned to conduct the on-site evaluation. The identity of the applicant institution is kept confidential and made public only if accreditation is granted. Periodic resurveys must be scheduled, and those homes failing the initial test may reapply when sufficient improvement has been made to warrant resurvey.

III

Advantages of nursing home accreditation from a reputable body such as the council are many. Through it, the public is given a yardstick with which to measure the excellence of nursing home care in terms easily understood. Accreditation carries the important connotation that the facility has *voluntarily* met high standards established by competent authority. Physicians are thereby given reliable criteria with which to evaluate any home to which a patient may be referred.

The council is conducting an education program, too. Officers and executive staff members are visiting state medical associations and conducting regional workshops to stimulate interest in the program. A physician is the chief executive officer.

Communications have been established with state medical and nursing home associations who are asked to support the program. The AMA has provided much leadership in bringing the program of NCANH to reality, and medical interest is giving it more vigorous life. It is a worthy endeavor, fulfilling a vital and necessary role, a splendid example of medical leadership in the quest for better health care.—R.B.K.

Delegates at Work

Who are the physicians who make top medical policy as members of the AMA House of Delegates? Obviously, they are leaders, because they occupy their posts of high responsibility at the pleasure of their state medical association colleagues. Of the 228 members, only 21 represent the scientific sections and five, the government medical services. Although AMA officers, Trustees, and council chairmen are *ex officio* members, together with past officers and Trustees, they may not vote. Representation of the 54 state and territorial medical associations, meaning the 50 states, the District of Columbia, Canal Zone, Puerto Rico, and the Virgin Islands, is apportioned at the rate of one delegate per 1,000 members or fraction thereof.

By fields of professional interest, the AMA House represents an excellent cross-section of American medicine. As might be expected, general practitioners are the largest single discipline with 49 members. General surgeons are close with 41, but taken with other surgical specialties, they would make up the largest combined numeric group. There are 39 internists and 21 obstetricians-gynecologists. There are seven each among pediatricians, orthopaedic surgeons, and urologists. After the group of 13 in administrative medicine, the remaining specialties are represented by one to five members. There are only nine zeroes in the long list of specialties and subspecialties.

In the last decade and a half, the Mississippi State Medical Association has been represented by the disciplines of general practice, surgery, preventive medicine, obstetrics and gynecology,

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and pediatrics. In this period, never once has Mississippi had a delegate absence marked against it.

Taken as a group, the AMA House of Delegates is conservative, thoughtful, judicious, and highly resourceful. Each member must devote about two weeks per year for the annual and clinical conventions, and it's unusual for more than one or two to be absent when the credentials committee reports attendance. The tasks before the House are substantial, as well illustrated by the enormity of the reports folder.

Debate is free and open, for any member of the American Medical Association may discuss his or her views before reference committees. In fact, debate is occasionally spirited, but on the whole, it is free of acrimony and does credit to the dignity and obligations of the profession. And a good majority of the delegates are articulate, sharp debaters, too. Every member of AMA should see and hear *his* House of Delegates at work. As with a state legislature or the Congress, not every action pleases every physician, but the House is the basis of a fair, competent policy-making system of which medicine can be proud.—R.B.K.

The 'Every Time' Generic Squabble

The Food and Drug Administration isn't giving up easily in the celebrated "every time" generic name regulation which a federal district court ordered it not to enforce (*Newsletter*, J.M.S.M.A. V:6 (Nov.) 1964). As originally promulgated, the regulation required the drug manufacturer to state the generic name of a preparation with every appearance of the brand name in letters at least half as large as those depicting the brand. The cause was brought by the Pharmaceutical Manufacturers Association and 37 of its member companies who contended that the language of the law did not empower FDA to make such a rule.

Now the FDA attorneys are hitting back with an appeal which includes these points:

Declaratory relief is not appropriate because there is no justiciable controversy, a four dollar expression for no case to press. It says that enforcement of the regulation would not cause irreparable harm.

"At worst," the FDA argues, "the judgment gives 140 drug companies, most of which are not even parties to the suit, the right to continue the distribution of large volumes of promotional materials which PMA claims is in compliance with the law, even though the court did not examine a single piece of labeling or advertising. . . ."

FDA even hits a technical point, stating that the suit was unconsented by the United States government. It is also reported that the brief analyzes at length FDA laws and the intent of the Congress in these enactments.

No single industry is more totally committed to product integrity and consumer safety than the American pharmaceutical industry. Nobody suggests for a moment that there have never occurred some few untoward results in use of drugs, but physicians point out that all drugs have danger inherent in use and misuse. The generic "every time" squabble seems to be a symptom rather than a disease, perhaps one indicating more and more governmental controls. If this regulation prevails, then the entire health team may be one step closer to generic name only, a spectre unpleasant to contemplate. If the business and scientific climate in which American pharmaceuticals are developed and marketed has merit—and it has, then the system is clearly entitled to a fair shake with the long term test being service, reliability, ingenuity, and competitive survival.—R.B.K.

LETTERS

SIRS: We very much appreciate your generous donation to the College of Medicine through the AMA-ERF. The $16,000 we received last year from this source was of great help to us as we tried to meet the budgetary needs of the College. Even more than the funds received, this evidence of your continued interest in the College is heartwarming.

M. K. CALLISON, M.D.
DEAN
UNIVERSITY OF TENNESSEE
COLLEGE OF MEDICINE
MEMPHIS, TENN.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical society in the Mississippi State Medical Association and the American Medical Association:

CAMPBELL, CHARLES WALTON, Lexington. Born Lexington, Miss., Aug. 8, 1933; M.D., University of Mississippi School of Medicine, Jackson, 1961; interned Mississippi Baptist Hospital, Jackson, one year; elected to membership Sept. 16, 1964, by the North Central District Medical Society.

Causey, Harry Gene, Lexington. Born Meridian, Miss., Oct. 17, 1931; M.D., Tulane University School of Medicine, New Orleans, La., 1956; interned University of Mississippi School of Medicine, Jackson, one year; captain, U. S. Army, two years; elected Sept. 16, 1964, by the North Central District Medical Society.

Edwards, Paul Eve, Jr., Columbus. Born Patterson, La., Dec. 1, 1931; M.D., University of Mississippi School of Medicine, Jackson, 1960; interned St. Thomas Hospital, Nashville, Tenn., one year; elected to membership Sept. 15, 1964, by the Northeast Mississippi Medical Society.

Elliott, John Pascal, Jr., Tupelo. Born Columbus, Miss., Sept. 14, 1933; M.D., Tulane University School of Medicine, New Orleans, La., 1958; interned Touro Infirmary, New Orleans, La., one year; internal medicine residency, Touro Infirmary, New Orleans, La., one year; urology residency, Touro Infirmary, New Orleans, La., one year; urology residency, V. A. Hospital, Alexandria, La., three years; elected to membership September 15, 1964, by the Northeast Mississippi Medical Society.

Farber, Louis Allen, Jackson. Born Cordell, Okla., Jan. 4, 1921; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned University of Mississippi School of Medicine, Jackson, one year; orthopedic surgery residencies, University of Mississippi School of Medicine, Jackson, and the Mississippi Baptist Hospital, Jackson; lieutenant, U. S. Navy; elected to membership Sept. 1, 1964, by Central Medical Society.

Mayer, Leo Loeb, Jackson. Born Van Buren, Ark., Feb. 14, 1899; M.D., St. Louis University School of Medicine, Mo., 1923; interned Jewish Hospital of St. Louis, Mo., one year; certified by the American Board of Ophthalmology; elected to membership Sept. 1, 1964, by the Central Medical Society.

Moffitt, Ellis Mumford, Jackson. Born Corinth, Miss., Oct. 30, 1924; M.D., Tulane University School of Medicine, New Orleans, La., 1960; interned Mississippi Baptist Hospital, Jackson, one year; fellowship, University of Virginia Hospital, Charlottesville, one year; internal medicine residency, V. A. Hospital, Louisville, Ky., two years; elected to membership Sept. 1, 1964, by the Central Medical Society.

Pate, Samuel Ray, Jr., Lexington. Born Isola, Miss., Nov. 11, 1929; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned University of Mississippi School of Medicine, Jackson, one year; elected to membership June 1964, by the North Central District Medical Society.

Raines, Oney Carstaffen, III, Gulfport. Born Waco, Texas, July 9, 1935; M.D., Tulane University School of Medicine, New Orleans, La., 1960; interned Charity Hospital of Louisiana, New Orleans, one year; ob-gyn residency, Charity Hospital of Louisiana, New Orleans, three years; elected to membership Sept. 9, 1964, by the Coast Counties Medical Society.

Robinson, McWillie Mitchell, Jr., Jackson. Born Jackson, Miss., May 18, 1933; M.D., Tulane University School of Medicine, New Orleans, La., 1958; interned Charity Hospital of Louisiana, New Orleans, one year; residencies, V. A. Hospital, New Orleans, La., and the Mississippi Baptist Hospital, Jackson; elected to membership Sept. 1, 1964, by the Central Medical Society.

Talley, Joseph Sanford, Greenwood. Born Tupelo, Miss., Jan. 30, 1934; M.D., University of Tennessee College of Medicine, Memphis, 1960; interned Baptist Memorial Hospital, Memphis, Tenn.; elected to membership Oct. 14, 1964, by the Delta Medical Society.

Welch, William Claud, Jr., State College. Born Tupelo, Miss., Oct. 30, 1935; M.D., University of Mississippi School of Medicine, Jackson, 1961; interned University of Mississippi School of Medicine, Jackson, one year; elected to membership Sept. 15, 1964, by the Northeast Mississippi Medical Society.

West Society Names Dr. Mitchell President

Dr. Tom H. Mitchell of Vicksburg was named president of the West Mississippi Medical Society at the group's October meeting.

Vice presidents are Dr. William Carnes, Warren County and Dr. Rex Goodman, Issaquena and Sharkey Counties. Dr. Patrick G. McLain of Vicksburg is secretary-treasurer.

Dr. Alton Ochsner of New Orleans was the guest speaker. Dr. Ochsner's topic was "Carcinoma of the Lung."

THE LITERATURE

Book Reviews

X-Ray Technology, third edition. By Charles A. Jacobi, B.Sc., R.T. (ARRT), and Don Q. Paris, R.T. (ARRT). 452 pages with 306 figures. St. Louis: C. V. Mosby, 1964. $11.50.

This book is a compilation of instructional material used by the authors in conducting a school of x-ray technology. The book is well organized into 16 chapters, each of which is brief, with most of the substance of the book being devoted to radiographic positioning. There are many well-produced illustrations. Adequate background in electricity, physics, radiographic principles, anatomy, and physiology is given. Brief chapters also are included on preventive maintenance, dark room procedure, and medical ethics. Materials are arranged in excellent sequence for a beginning student in x-ray technology.

This small text is a practical book to be used in basic instruction of x-ray technologists and is recommended for the beginning student x-ray technician as well as for a technician on his own in smaller hospitals and clinics. It might also be of benefit to a general practitioner of medicine who uses an x-ray machine for screening procedures.

ELMER J. HARRIS, M.D.

Current Pediatric Therapy. By Sidney S. Gellis and Benjamin M. Kagan, coeditors. 747 pages. Philadelphia and London: W. B. Saunders Company, 1964. $16.00.

Current Pediatric Therapy was written in an effort to compile into one volume a handy reference for the busy practitioner. This volume brings together the opinions of a formidable number of specialists who devote a great deal of their time and effort in keeping abreast of the most recent information relative to the particular problems they discuss.

The format of the book is arranged to cover a wide variety of pediatric problems. This arrangement for the most part is according to body systems. There is very little information concerning the diagnosis and patho-physiology of a particular disease. The author, after a brief description of the disease or condition, outlines his therapy under general and then specific therapy.

The section on poisoning is fairly comprehensive. This includes a list of the Poison Control Centers in the United States listed by states and their principal cities in which the centers are found.

Diseases peculiar to the newborn infant include a well-written section concerning treatment of the respiratory distress syndrome. The outline of intravenous fluid therapy, when needed in this condition, will be helpful in managing an infant without benefit of a blood pH determination.

In summary, this book is a handy, easily read, and nicely indexed reference to be added to the library of any pediatrician or general practitioner who treats infants and children. At times the reader felt that some of the areas of specific therapy might have been more thoroughly pursued.

GEORGE W. HERRING, M.D.

PERSONALS

VERNER HOLMES has been named a director of the McComb Chamber of Commerce.

HERBERT A. MCPHERSON, JR., has announced the opening of his office in Columbus for the practice of obstetrics and gynecology.

WILLIAM HALL PRESTON has opened his office in Booneville for the practice of obstetrics and gynecology. He will be associated with Anderson's Clinic. Dr. Preston received his B.A. degree from Baylor University and took graduate and pre-med work at Peabody and Vanderbilt University. He received his M.D. degree from the University of Tennessee and completed his internship at D. C. General Hospital in Washington, D. C. He served his residency at Vanderbilt University. Dr. Preston has just returned from several months in the Department of Anesthesiology, Western Reserve University, Cleveland, Ohio, where he studied the application of new surgical anesthesia techniques in obstetrics. Dr. Preston is married to the former Jane Anderson, daughter of Dr. and Mrs. W. H. Anderson of Booneville.

DEATHS

HOLMES, ANGUS EUGENE, Terry. M.D., Harvard Medical College, Boston, Mass., 1953; interned North Carolina Memorial Hospital, Chapel Hill, one year; died Oct. 24, 1964, aged 39.

YATES, RILEY BARBER, Greenwood. M.D., Memphis Hospital Medical College, Tenn., 1912; died Oct. 29, 1964, aged 76.

State Morbidity Reported Through Oct. 30

The Mississippi State Board of Health reports the following occurrence of morbidity for 1964 through the 44th week of the year, ending Oct. 30, 1964. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	825
Tuberculosis, O.F.	184
Salmonella infections	46
Brucellosis	3
Encephalitis, infectious	24
Typhoid Fever	2
Dysentery	
Bacillary	68
Amoebic	11
Dysentery, N.O.S.	3
Food Poisoning, N.O.S.	5
Diphtheria	5
Septicemia, Staph.	21
Septicemia, Strep.	1
Septicemia of newborn	1
Diarrhea of newborn	8
Septicemia, N.O.S.	15
Septicemia, Other	1
Meningococcal infection	22
Meningitis, O.F.	43
Gastro-enteritis	4
Tularemia	5
Mononucleosis, infectious	67
Toxoplasmosis	1
Hepatitis, infectious	211
Hepatitis, serum	1
Tetanus	5
Bacterial Diseases, Other	1
Poliomyelitis	1
Helminthic infections	
Hookworm	961
Ascariasis	262
Strongyloides	63
Blastomycosis	3
Histoplasmosis	20
Sepsis, puerperal	8
Rheumatic fever	4
Myelitis	2
Polyneuritis	1
Moniliasis	1
Adenovirus	2
Mycotic, N.O.S.	1
Other inf. and parasitic diseases	1
Streptococcus infections	
Scarlet fever	133
Strep throat	2,789
Taeniasis	8
Pertussis	115
Measles	6,728
Chickenpox	1,052
Mumps	948
Other Cestode Infestations	11
Influenza	420
Gonorrhea	4,450
Syphilis	
Early	440
Late	135

Ob-Gyn Board Sets Part I Exams

Candidates participating in the Part I (written) examination of this Board given on Dec. 11, 1964, will be notified of the results of their examination on or before Feb. 1, 1965.

All candidates who have completed 18 months each of approved progressive residency training in clinical obstetrics and clinical gynecology by June 30, 1965, will be eligible to apply for admission to the Part I (written) examination to be held on July 2, 1965. Application forms and current Bulletins may be obtained by writing to the office of the Secretary, Clyde L. Randall, M.D., American Board of Obstetrics and Gynecology, 100 Meadow Road, Buffalo, N. Y. 14216.

Completed applications for the Part I examination in 1965 will be accepted in the office of the Board only during January and February. Applications postmarked after Feb. 28, 1965 will not be accepted.

Diplomates of this Board are requested to keep the Secretary's office informed of any change in address.

Noted Cardiovascular Investigator Named Chairman of UMC Medicine Department

Dr. Harper K. Hellems has been appointed professor of medicine and chairman of the department at the University of Mississippi School of Medicine in Jackson. He replaces the late Dr. J. Robert Snavely, first chairman, who died in June.

Dr. Hellems

Dr. Robert Q. Marston, dean and University Medical Center director, announced Dr. Hellems' selection in late October, following approval of the Board of Trustees, Institutions of Higher Learning.

Since 1960, Dr. Hellems has been on the faculty of Seton Hall College of Medicine in Jersey City, N. J., as professor of medicine and director of the division of cardiovascular disease. Prior to this appointment, he served on the faculty of Wayne State University in Detroit for 10 years rising from assistant to full professor of medicine. He is recognized for his cardiovascular research and training program, which currently emphasizes coronary artery disease. While still in training some 20 years ago, Dr. Hellems was one of the team which developed the now standard method for measuring pressure inside the left heart, helping make possible modern surgery for heart defects.

In addition to his Seton Hall position, he is currently director of the cardiopulmonary institute at B. S. Pollack Hospital and consultant in internal medicine for the U. S. Public Health Service Hospital on Staten Island.

The 44-year-old physician-investigator is a member of the Association of American Physicians, of the cardiovascular study section of the National Heart Institute, and the editorial board of the *Journal of Laboratory and Clinical Medicine*. He is a fellow of the American College of Cardiology and the American College of Physicians. Among other professional organizations, he belongs to the American Federation for Clinical Research, Association of University Cardiologists, American Society for Clinical Investigation, American Physiological Society, New Jersey Medical Society, and American Heart Association. He is the author of more than 80 published papers.

A native West Virginian, Dr. Hellems attended the University of Virginia and received his M.D. degree from that school in 1943. He interned at Montreal General Hospital, was a Life Insurance medical research fellow assistant in medicine and later a senior assistant resident in medicine at Peter Bent Brigham Hospital in Boston, an assistant resident in medicine at West Roxbury (Massachusetts) Veterans Hospital. He served four years as research and teaching fellow in medicine at Harvard.

Dr. Hellems will assume his full duties towards the end of the current academic year, but will travel to Mississippi at intervals during the interim to confer on departmental activities.

Societies Asked for Robins Award Nominees

Nominations are now being accepted from component medical societies for the fourth annual MSMA-Robins award.

Deadline for the 1965 nominations is Jan. 31. Each component society is invited to submit one nomination from among its membership. Nominations should be in letter form and there is no restriction as to length of the letter or attached exhibits which assist in presenting the nominee's qualifications. An officer of the society must sign the nomination.

Recognizing outstanding community service by a physician, this year's award will be presented

during the 97th Annual Session scheduled for May 10-13, 1965, in Biloxi.

Nominees for the Robins Award must have been members in good standing of MSMA at the time the community service was rendered and when the award is actually made. The service recognized should be apart from purely professional attainment since suitable awards in these connections already exist, should have benefitted the local or state community in a civic, cultural, or general economic sense, should have been performed voluntarily and, except in unusual circumstances, should not have been uncompensated. The service need not, however, necessarily have been a single achievement.

From the maximum of 16 possible nominees, one from each component society, a final selection will be made by a board of judges representing geographical regions of the state.

The MSMA-Robins Award was established in 1962 in conjunction with the A. H. Robins Company of Richmond, Va., a long-established and respected manufacturer of ethical pharmaceuticals. Recipients to date include Dr. Thomas G. Ross of Jackson, 1962; Dr. Frank M. Davis of Corinth, 1963, and Dr. Howard A. Nelson of Greenwood, 1964.

Vanderbilt Professor Is Delta Society Essayist

Guest essayist for the 82nd Semi-Annual meeting of Delta Medical Society on Oct. 14 was Dr. Douglas H. Riddell, associate professor of surgery, Vanderbilt University.

Dr. Riddell spoke on "Some Practical Aspects of Endocrine Surgery."

During the business session Dr. Charles M. Dorrough, Jr., of Ruleville was elevated to president, and Dr. Thomas S. McCay of Belzoni was named president-elect. Dr. Howard A. Nelson of Greenwood was re-elected secretary-treasurer. The meeting was held in Indianalo.

Other speakers and their topics included Dr. John E. Rawls of Inverness, "A Doctor's Method of Evaluating His Business"; Dr. W. D. Austin of Greenville, "The Treatment of Otosclerosis"; Dr. Raymond W. Browning of Greenwood, "Surgical Correction of Congenital Anomalies of the Gastrointestinal Tract"; Dr. John D. Wofford of Greenwood, "Punch Biopsy of the Liver," and Dr. Eugene E. Tibbs of Cleveland, "Esophageal Hiatal Hernia."

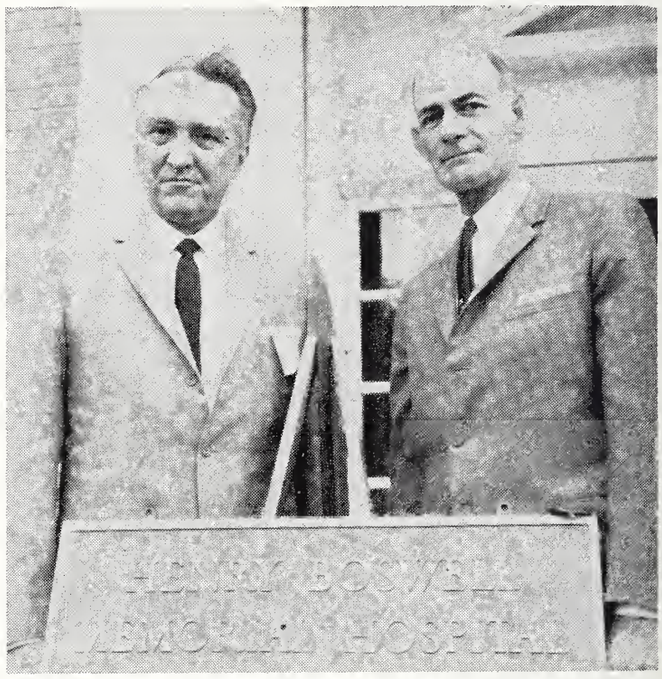
Discussers were Drs. Charles M. Dorrough, Jr., of Ruleville, John C. Suares of Greenville, John F. Lucas, Jr., of Greenwood, T. S. McCay of Belzoni, and Arthur W. Lindsey, Jr., of Cleveland.

Dr. Gruich Heads Coast Counties Society

Heading up Coast Counties Medical Society's new slate of officers is Dr. Frank G. Gruich of Biloxi, incoming president. He succeeds Dr. Gerald Wessler of Gulfport.

Other officers are Dr. Emile M. Baumhauer, Jr., of Pascagoula, president-elect; Dr. C. D. Taylor of Pascagoula, secretary, and Dr. C. Hal Cleveland of Gulfport, treasurer.

Sanatorium Honors Dr. Henry Boswell



In Nov. 1 ceremonies, the Main Infirmary at the Mississippi State Sanatorium was officially named the Henry Boswell Memorial Hospital. Governor Paul B. Johnson, right, shown with Dr. Clyde A. Watkins, Sanatorium Superintendent, was one of the speakers for the occasion. Other addresses were by Mr. Vassar Dacus of Greenville, president of the Henry Boswell Society; Mr. Judson M. Allred, Jr. of Jackson, executive officer, Mississippi Tuberculosis Association, and Dr. A. L. Gray of Jackson, State Health Officer. All of the speakers paid tribute to Dr. Boswell for his long service to the medical profession and to the control of tuberculosis.

Mississippi Dean Named To AAMC Office

Dr. Robert Q. Marston, dean of the University of Mississippi School of Medicine and Medical Center director, was elected to the executive council of the Association of American Medical Colleges during the final sessions of the association's annual meeting in Denver Oct. 16-21.

Dr. Marston

Dr. Marston replaced Dr. Thomas B. Turner, Johns Hopkins dean, who moved up to president-elect. The Mississippi medical educator also serves on the editorial board of the *Journal Medical Education*, official publication of the AAMC.

Dr. Marston's election to the key post in medical education came only days before his departure for Europe in late October. As chairman of the NIH International Fellowship Review Panel, he will spend the month of November visiting nominating committees, applicants, and former fellows in England, France, Poland, Yugoslavia, and Italy.

Dr. Vernon E. Wilson, Missouri dean, was reelected to the only other vacancy on the six-member AAMC board which includes Dr. George T. Harrell, University of Florida College of Medicine, Dr. John Parks, George Washington University School of Medicine, Dr. Granville A. Bennett, University of Illinois College of Medicine, and Dr. William N. Hubbard, Jr., University of Michigan Medical School.

Dr. George A. Wolf, Jr., Tufts University vice-president for medical and dental affairs, was elected president and Dr. Robert B. Howard, Minnesota, vice-president. Dr. Wolf succeeds Dr. Robert Berson, dean of the developing South Texas Medical School who is to assume the AAMA executive directorship in Chicago upon the retirement of Dr. Ward Darley.

The institutional membership of the AAMC is comprised of the accredited medical schools of the continental United States, Puerto Rico, the American University of Beirut, and the Graduate School of the University of Minnesota. Affiliate institutional members are the accredited medical schools of Canada and Philippines.

Dallas Firm Seeks Jackson Car Owner

Precision Motors of Dallas, Texas, has asked JOURNAL MSMA's help in locating a Jackson physician who drives a 1962 Oldsmobile, two-door hardtop.

A letter from Precision Motors notes that this vehicle was hit by one of the company's automobiles on Aug. 12, 1964. Following repairs, the Dallas company's bodyshop foreman neglected to get the physician's name, and insurance reimbursement is being held up.

Precision Motors asks that the owner of the car write the company immediately at 740 North Pearl, Dallas, Texas.

Central Dedicates Program To Medical Assistants

Central Medical Society's Nov. 3 program concentrated on the role of the medical assistant. Under the theme "Creating the Right Physician's Image by Good Office Practice," Dr. Joseph Mallory of Mattoon, Ill., gave the physician's standpoint and Mrs. Elvera Fishcer of Chicago., Ill., discussed the assistant's standpoint.

Dr. Mallory is a member of the AMA Speaker's Bureau, and Mrs. Fishcer is a member of the Board of Trustees of the American Association of Medical Assistants. Medical assistants from the eight country area were guests of the society.

Dr. Mallory told the physicians and medical assistants that "Medicine is a person-to-person relationship, close and intimate. . . . In many instances the doctor-patient relationship begins with the medical assistant. And her good performance as a professional medical assistant should begin with courtesy, concern for others, and the ability to demonstrate personal interest in the problems of others without becoming involved personally in them."

Mrs. Fishcer concentrated on "developing front office finesse." She pointed out the importance of public relations in the field of medicine and said, "Knowing well that the least able among them contributes to the reputation of all, there are groups of medical assistants all over the nation

forming medical assistant organizations for the purpose of teaching these assistants more effective and more professional service skills."

She noted that the American Association of Medical Assistants has instituted a national certification program and that "public relations is intertwined throughout the examination in all of the categories that are not strictly technical."

In its business session, Central members named Dr. Warren C. Jones of Forest as new president succeeding Dr. George E. Gillespie of Jackson. Other officers include Drs. Jim G. Hendrick of Jackson, president-elect; Dr. James R. Cavett, Jr., secretary-treasurer, and Dr. Robert P. Henderson, censors committee member.

Vice presidents named include Drs. Elmer J. Harris, Hinds; Frank W. Bowen, Leake; John R. Durfey, Jr., Madison; Curtis D. Roberts, Rankin; Howard D. Clark, Scott; Wayne P. Cockrell, Simpson; Charles R. Pyle, Smith, and Louis S. Chatham, Yazoo.

MHA Announces 1964-65 Grant Program

The Mississippi Heart Association is now accepting applications for its 1965-66 research grants and fellowships program. Deadline for receipt of applications is March 1, 1965.

Grants are made to nonprofit institutions in direct support of a particular investigator, for a specific program of research under his direction. Grants are awarded in support of research in the cardiovascular field or basic sciences related to it for periods of one to three years.

Applications will be reviewed by the Research Grants and Fellowships Committee of the state heart association. Grants will be approved on or about April 1, 1965 and awards will be made July 1, 1965.

Further information and application forms may be secured from Miss Lucile Little, Executive Director, P.O. Box 584, Jackson, Miss.

The MHA 1964-65 awards totalled $62,632 in addition to the association's $20,000 yearly support of the Research Professorship in Cardiology held by Dr. William D. Love at the University of Mississippi School of Medicine. Another $24,466 was contributed to the national research program, bringing Mississippi's stake in heart research this year to $107,098.

Fayette Honors Dr. Harper

The Town of Fayette and Jefferson County honored Dr. Robert Blackburn Harper of Fayette on Nov. 7 with a program observing the 75-year-old physician's 50th anniversary of medical practice.

During the ceremony Dr. Harper was presented with the pin and certificate, emblematic of membership in the MSMA Fifty Year Club.

The entire town was invited to the program held in Confederate Memorial Park in Vicksburg. The ceremony was planned by Fayette's mayor and Board of Aldermen.

Dr. Harper attended the University of Mississippi from 1906 to 1908. He became a registered druggist in 1908 and practiced pharmacy at Fayette and Meridian for two years. In 1910 he returned to Ole Miss and received the B.S. degree and a two-year medical certificate in 1912. He received the M.D. degree from Tulane University in 1914 and interned at Natchez Charity Hospital.

After practicing in McBride and Marks, and two years in the U. S. Medical Corps, Dr. Harper opened his practice in Fayette in 1922 and has been there ever since.

New Orleans Assembly Sets 28th Meeting

The 28th annual meeting of the New Orleans Graduate Medical Assembly will be held March 8, 9, 10, and 11, 1965, headquarters at the Roosevelt Hotel.

Nineteen outstanding guest speakers will participate and their presentations will be of interest to both specialists and general practitioners. The program will include 55 informative discussions on many topics of current medical interest, in addition to clinicopathologic conferences, symposia, medical motion pictures, round-table luncheons, and technical exhibits.

Details of the New Orleans meeting are available at the office of the Assembly, Room 1528, 1430 Tulane Ave., New Orleans, La. 70112.

pain is almost invariably a presenting symptom in cases of skeletal muscle spasm

In some instances, the pain subsides on relaxation of the muscles in spasm. In others, relaxant therapy alone fails to give adequate relief, and supplementary analgesia (and possibly sedation) are indispensable, as in cases of:

provocative pain, when muscle spasm is triggered by some painful underlying musculoskeletal defect.

residual pain, when relaxation of severe spasticity leaves a degree of myalgia that tends to reinvoke spasm.

severe pain, when the degree of pain is such as to cause persistence of symptoms in spite of relaxant therapy.

emotionally aggravated pain, when anxiety or agitation creates tension that thwarts the efficacy of both relaxant and analgesic medication.

In such cases, ROBAXISAL and ROBAXISAL-PH have proven highly effective in assuring decisive and comprehensive relief. The ROBAXISAL formula—of ROBAXIN (methocarbamol), the potent muscle relaxant, together with aspirin, the time-tested and proved analgesic—produces higher plasma salicylate levels than equivalent doses of aspirin alone, and serves effectively to control both spasm and pain. ROBAXISAL-PH's combination of ROBAXIN (methocarbamol) with the analgesic-sedative ingredients of the PHENAPHEN formula—including phenobarbital—helps additionally to ease apprehension.

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MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Meeting, Nov. 29-Dec. 2, 1964, Bal Harbour, Fla. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn, Chicago 10, Ill.

International College of Surgeons, North American Federation, April 25-29, 1965, Las Vegas, Nev. Mr. Stanley Henwood, Executive Director, 1516 Lake Shore Dr., Chicago 60610.

American College of Surgeons, Oct. 18-22, 1965, Atlantic City. John F. North, Director, 55 E. Erie, Chicago 11, Ill.

STATE AND LOCAL

Mississippi State Medical Association, May 10-13, 1965, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday January, First Wednesday March, May, July, September, November. Charles D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March, June, September, and December. William E. Riecken, Jr., P. O. Box 831, Kosciusko, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday April and October, Oxford. Vernon B. Harrison, P. O. Box 36, University, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucius Olen Crosby Memorial Hospital, Picayune, Secretary.

South Central Mississippi Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.

The discharged mental patient . . . and Thorazine®

brand of chlorpromazine

"The average practitioner is quite capable of handling the vast majority of ex-institutionalized patients by regulation of medication, reassurance, manipulation of the environment where necessary, and . . . other technics." Kline, N.S.: Postgrad. Med. *27*:620 (May) 1960.

The family physician must often assume responsibility for the discharged mental patient. Thorazine (chlorpromazine, SK&F) can be a valuable adjunct to the continuing care of this patient, because it helps prevent relapses by insulating him from the impact of stressful experiences. For successful rehabilitation and prevention of rehospitalization, however, the former mental patient—and often his family—also needs the guidance and counsel of his physician.

Many physicians are surprised by the high doses of Thorazine (chlorpromazine, SK&F) used in patients released to their care from mental hospitals. This surprise may be expressed by a drastic reduction in dosage "to play it safe"—with serious consequences for the patient.

The successful maintenance of former mental patients requires adequate, often "high" dosage, and often for prolonged periods of time. Fortunately, these dosages do not mean greater risks for the patient. On the contrary, there is much less risk of serious side effects once a patient has become gradually accustomed to Thorazine (chlorpromazine, SK&F)—*regardless of dosage*—over a period of a few months. Continuing therapy is almost always well tolerated, and is essential to most patients' continued well-being.

Brief Summary: Thorazine (chlorpromazine, SK&F) has been successfully used for 10 years in the treatment of mental and emotional disturbances, and has proven highly effective in the maintenance therapy of former hospitalized mental patients. *Principal side effects:* The most frequently encountered side effect is transitory drowsiness. Other occasional side effects include: dry mouth, nasal congestion, constipation, miosis, dermatological reactions, photosensitivity, jaundice, hypotension, increased appetite and weight; very rarely, mydriasis, agranulocytosis, extrapyramidal symptoms. *Contraindications:* Comatose states or in the presence of excessive amounts of C.N.S. depressants.

For complete prescribing information, please see *PDR* or available literature.

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National Society Formed For Facial Plastic Surgery

The American Academy of Facial Plastic and Reconstructive Surgery was formed Oct. 18 through the merger of two national associations of otolaryngologists.

Entering into the merger were the American Otorhinologic Society for Plastic Surgery, and the American Society of Facial Plastic Surgery. The membership of both groups approved the move at a meeting in the Palmer House.

The new medical society, expected to include approximately 700 physicians, will consist mainly of otolaryngologists who perform plastic and reconstructive surgery of the head and neck. It was formed with the assistance of the American Medical Association and the American Academy of Ophthalmology and Otolaryngology.

A nonprofit organization, the new society is established, according to its constitution and by-laws, to "stimulate study, research and scientific advancement in the field of plastic and reconstructive surgery and all related basic sciences."

President of the newly merged Academy is Dr. Irving B. Goldman, New York, and president-elect is Dr. John T. Dickinson, Pittsburgh.

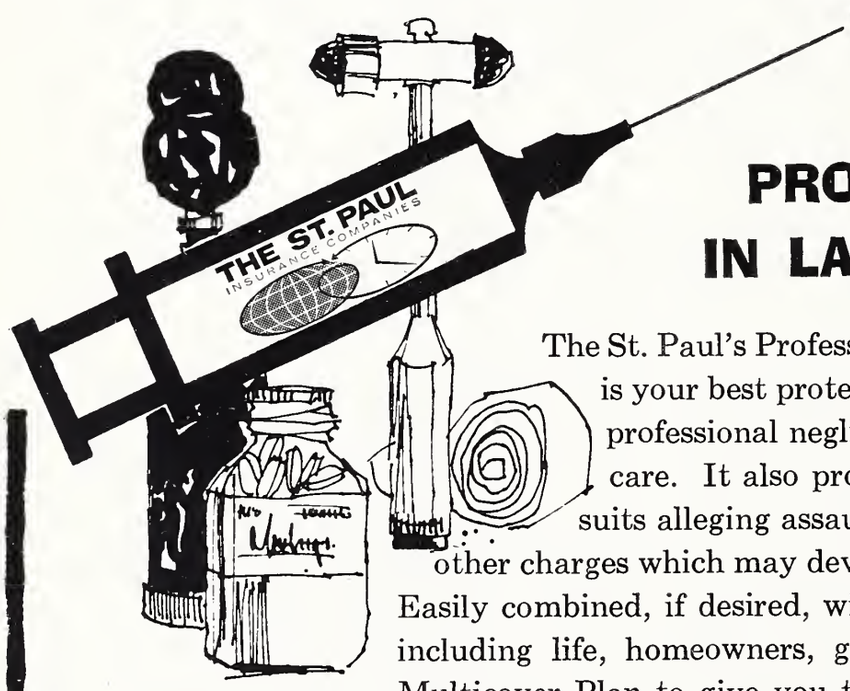
Dr. Goldman is chief, Rhinoplastic Clinic, Mount Sinai Hospital. Dr. Dickinson is clinical associate professor of otolaryngology, University of Pittsburgh Medical School.

Chest Physicians Plan New York Meet

The 31st Annual Meeting of the American College of Chest Physicians will be held June 17-21, 1965, at the Waldorf-Astoria Hotel in New York.

The final day of the meeting, June 21, will be a combined session with the American College of Chest Physicians and the Section on Diseases of the Chest of the American Medical Association.

The sessions will include formal papers, symposia, round table luncheon discussions and on June 21, during the combined AMA-ACCP meeting, the popular Fireside Conferences will be held.



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Mississippi state medical
association. Journal.
v. 5, 1964

DATE ISSUED TO

X65-970

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v. 5, 1964.

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